MD Program
UNIVERSITY OF TORONTO

2016-2017

Teacher Handbook

Acknowledgements:

The land on which the MD Program operates has been a site of human activity for thousands of years. This land is the traditional territory of the Huron-Wendat and Petun First Nations, Seneca and most recently the Mississaugas of the New Credit. The territory was the subject of the *Dish With One Spoon*, Wampum Belt Covenant which is an agreement to peaceably share resources around the Great Lakes. Today Toronto is also home to many Indigenous people from across Turtle Island, and we are grateful to have the opportunity to work in the community and on this important traditional territory and meeting place.

The MD Program is grateful to Jennifer Anderson, Marina Couchman, Joanie Fong, Bektu Abidta, Valerie Villarosa, Andrea Concil, Paul Tonin, Nadia Taylor and Martin Schreiber for their development of this handbook. This publication represents the efforts of many individuals who contributed and verified the content, and also provided feedback on the design of the publication.

Please direct any questions or comments about the handbook to md.vicedean@utoronto.ca.

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A message from the Vice Dean, MD Program

Dear colleagues:

Thank you for your commitment and dedication to teaching our students and supporting them on their journey to becoming physicians.

I am pleased to present our Teacher Handbook, which aggregates essential information that will help you throughout your teaching experience in the MD Program.

Through our program, we strive to prepare students to care for patients collaboratively and holistically, as part of a health care team. We are continuously innovating, engaging and looking for ways to make our program better to ensure our graduates are responsive to the evolving needs and expectations of Canadians.

This year marks many important changes to our program that are aimed at ensuring the best possible experience for our students and teachers.

In addition to launching the Foundations Curriculum for first year students entering the program, we have also launched a new competency framework for the MD Program. The new competency framework represents a collaborative effort to align the existing U of T MD Program objectives with a competency-based approach to medical education. The new Foundations Curriculum offers teachers greater opportunity to build relationships with students as their advisors, mentors and advocates.

I look forward to working together to as we build a responsive and continuously improving learning environment that inspires meaningful relationships between students and teachers, patients and families.

Patricia Houston, MD, MEd, FRCPC
Vice Dean, MD Program

Introduction

2016-17 key dates & holidays

Statutory holidays are marked with an asterisk (*). Other holidays are indicated for information only. Students who observe these or other holidays may request permission for absence.

Year 3 begins	Monday, August 22, 2016
Years 1 and 2 begins	Monday, August 29, 2016
*Labour Day	Monday, September 5, 2016
Year 4 begins	Tuesday, September 6, 2016
Eid-al-Adha	Saturday, September 10, 2016 – Wednesday, September 14, 2016
Rosh Hashanah	Sunday, October 2, 2016 (p.m.) – October 4, 2016
*Thanksgiving	Monday, October 10, 2016
Yom Kippur	Tuesday, October 11, 2016 (p.m.) – Wednesday, October 12, 2016
Sukkot	Sunday, October 16 (p.m.) – Tuesday, October 18, 2016
Shemini Atzeret/Simchat Torah	Sunday, October 23 (p.m.) – Tuesday, October 25, 2016
Diwali	Wednesday, October 30, 2016
Hanukkah	Saturday, Dec. 24, 2016 (p.m.) –Sunday, January 1 2017
Winter Break (Years 3 and 4)	Saturday, December. 17, 2016 – Sunday, January 1, 2017
Winter Break (Years 1 and 2)	Wednesday, December 21, 2015 – Friday, December 30, 2016
Feast of the Nativity	Saturday, January 7, 2017
Christmas (Orthodox)	Saturday, January 7, 2017
CaRMS Interview Break (Year 4)	Saturday, January 14, 2017 – Sunday, February 5, 2017
Lunar New Year	Saturday, January 28, 2017
*Family Day	Monday, February 20, 2017
March Break (Year 3)	Saturday, March 11 – Sunday, March 19, 2017
March Break (Year 1 and 2)	Monday, March 13 – Friday, March 17, 2017
PURIM	Saturday, March 11 (p.m.) – Sunday, March 12, 2017
First two days of Passover	Monday, April 10 (p.m.) – Wednesday, April 12, 2017
Year 4 ends	Thursday, April 13, 2017
*Good Friday	Friday, April 14, 2017
Holy Friday (Orthodox)	Friday, April 14, 2017
Easter Sunday (Orthodox)	Sunday, April16, 2017
*Easter Sunday (Western)	Sunday, April 16, 2017
Last two days of Passover	Sunday, April 16 (p.m.) – Tuesday, April 18, 2017
Easter Monday	Monday, April 17, 2017
*Victoria Day	Monday, May 22, 2017
Ramadan	Friday, May 26 (p.m.) – Sunday, June 25, 2017
Year 1 ends	Monday, May 29, 2017
Year 2 ends	Tuesday, May 30, 2017
Shavuot	Tuesday, May 30 – Thursday, June 1, 2017
Aboriginal Day of Prayer	Tuesday, June 21, 2017
*Canada Day	Saturday, July 1, 2017
Summer Breather Weekend (Year 3)	Friday, June 30 – Monday, July 3, 2017

MD Program overview (YEARS 1 – 4)

Curriculum goals & competencies

Curriculum goals

Recognizing the continuum of medical education and the compelling logic of linking medical student education to subsequent post-graduate training and continuing education, and the scientific and humanistic foundations of medicine, the University of Toronto, Faculty of Medicine has adopted the following goals for the MD Program curriculum:

1. Graduates of the MD Program will demonstrate the foundation of knowledge, skills and attitudes necessary to achieve the CanMEDS and CanMEDS-FM competencies.
2. In keeping with the Faculty of Medicine's vision of international leadership in improving health through innovation in research and education and commitment to social responsibility, the MD Program curriculum will encourage, support and promote the development of future academic health leaders, who will contribute to our communities, and improve the health of individuals and populations through the discovery, application and communication of knowledge.

Achievement of these curriculum goals is supported by the MD Program competency framework, which is summarized below.

Competency framework

The U of T MD Program competency framework, approved by Faculty of Medicine Faculty Council on February 8, 2016, consists of key and enabling competencies that are classified according to the seven CanMEDS roles: Medical Expert, Communicator, Collaborator, Leader, Health Advocate, Scholar, and Professional. These roles constitute the competency frameworks of both the Royal College of Physicians and Surgeons of Canada and the College of Family Physicians of Canada.

Learning within each of the CanMEDS roles is facilitated by pursuing the relevant 'key' competencies listed in the chart that follows. Each of the key competencies is in turn supported by achievement of several 'enabling' competencies, which are available on our MD Program competencies webpage. Further elaboration of several of the enabling competencies (those marked with an asterisk) is provided in appendices, which can be accessed on the webpage.

The language used to describe the competencies is of necessity fairly general, and for the most part does not specify precisely the desired level of achievement within any given domain. A separate milestones document provides guidance about the level of achievement expected with respect to each enabling competency at the time of entry to clerkship and at the time of graduation. This milestones document is available on our MD Program competencies webpage.

MD Program overview (YEARS 1 – 4)

Key competencies

Role	Key competencies
Medical Expert	1. Apply medical knowledge, clinical skills and professional attitudes to the provision of patient-centred care. 2. Perform a patient-centred clinical assessment. 3. Propose and participate (under appropriate supervision) in implementing management plans. 4. Understand and participate in continuous improvement in health care quality and patient safety. Contribute to improving the health of individuals and the population.
Communicator	1. Establish professional therapeutic relationships with patients and their families. 2. Use patient-centred skills to seek, gather, select and interpret accurate and relevant information of the clinical situation, incorporating the perspectives of patients and their families to inform management. 3. Engage patients and their families in developing plans that reflect the patient's health care needs and goals. 4. Share health care information and plans with patients and their families while adhering to principles of confidentiality and consent. 5. Document and share written and electronic information about the medical encounter, and share this information orally, with other members of the health care team, to optimize clinical decision-making, patient safety, and privacy.
Collaborator	1. Work effectively with physicians, trainees and other colleagues in the health care professions. 2. Consult effectively with physicians, trainees and other colleagues in the health care professions to provide care for individuals, communities and populations. 3. Work with physicians, trainees and other colleagues in the health care professions to prevent misunderstandings, manage differences, and resolve conflicts. 4. Effectively and safely transfer care to another health care professional.
Leader	1. Contribute to the improvement of health care delivery in teams, organizations and systems. 2. Engage in the stewardship of health care resources. 3. Demonstrate leadership in professional practice. 4. Manage one's time and plan one's career.

Health Advocate	1. Respond to the individual patient's health needs by advocating with the patient within and beyond the clinical environment. 2. Respond to the needs of the communities or patient populations they serve by advocating with them for system-level change.
Scholar	1. Engage in the continuous enhancement of their professional activities through ongoing learning. 2. Teach students, residents, and other colleagues in the health care professions. 3. Integrate best available evidence into practice. 4. Contribute to the creation and dissemination of knowledge and practices applicable to health.
Professional	1. Demonstrate a commitment to patients by applying best practices and adhering to high ethical standards. 2. Demonstrate a commitment to society by recognizing and responding to societal expectations in health care. 3. Demonstrate a commitment to the profession by adhering to standards and participating in physician-led regulation. 4. Demonstrate a commitment to physician health and well-being to foster optimal patient care.

Structure & Leadership

A team of senior academic and administrative leaders is responsible for the management of the MD Program. Governance is supported by a robust committee structure that includes active participation by student leaders, with the exception of our operational committees. Student members are selected by their classmates and hold a position on the Medical Society Executive or their Class Council.

See MD Program website for Committee and Portfolio Structure and organizational chart.

Decision-Making in the Faculty of Medicine & MD Program

The Faculty of Medicine, and the MD Program portfolio within it, is a complex organization. The brief description below may be useful in helping students understand the functioning of the medical school and how they can contribute directly to it.

MD Program overview (YEARS 1 – 4)

Governance and management: separate but linked

The Faculty of Medicine – like the University of Toronto as a whole – is directed through paired *governance* and *management* structures.

In general terms, *governance* can be understood as the authority and responsibility to set appropriate principles and policies for an institution in order to establish the direction of its activities. By contrast, *management* is the authority and responsibility to run the day-to-day operations of an institution in accordance with the principles and policies that have been established by governance.

In the Faculty of Medicine, governance is the purview of the Council of the Faculty of Medicine (commonly referred to as 'Faculty Council'), while management is the purview of the Dean of Medicine Dr. Trevor Young, the Vice Deans and Associate Deans (which together are referred to as the Decanal Team), the CAO, and the Senior Managers. Both the governance and management structures work closely with the Faculty's Departments (via the Chairs), the Extra-Departmental Units (via the Directors), and programs (via the Vice Deans Education).

Faculty Council

Faculty Council has a broad membership base, with representation from the student body (undergraduate, graduate and postgraduate), faculty, Chairs, Deans, and administrative staff. There are 23 student seats, including 12 reserved for students in the MD Program. The Dean and entire Decanal Team serve on Faculty Council to ensure cohesion with the management structure. Faculty Council is led by a Speaker, which is an appointment drawn from among the faculty members of the Council.

Meetings of Faculty Council are held three times a year and are open to the general public. Meeting dates are posted, along with the minutes of previous meetings on the Faculty of Medicine website.

The Faculty Council has a number of standing committees, the memberships of which are drawn from a combination of Council members and other individuals from the Faculty of Medicine. The standing committees include Boards of Examiners for each of the health professional programs, an Appeals Committee, an Education Committee, a Continuing Professional Development Committee, a Research Committee, and two procedural bodies: an Executive Committee and Striking Committee. Some items approved by Faculty Council are then submitted to the Governing Council of the University of Toronto for final approval. The Governing Council is the senior governing body of the university that oversees the academic, student, and business affairs of the University (www.governingcouncil.utoronto.ca).

MD Program overview (YEARS 1 – 4)

Management committees of the Dean

Several management committees are chaired by the Dean or report to him. Chief among these is the Dean's Advisory Group, which provides advice and feedback to the Dean on a wide variety of issues tabled by the Dean and/or other members of the group. It consists of senior academic and administrative leaders, including the entire Decanal Team.

In addition, there are four committees of Department Chairs: All Chairs' Committee, Basic Science Chairs' Committee, Clinical Science Chairs' Committee, and Rehabilitation Science Chairs' Committee. Together, the management committees serve as a forum for discussion and receive updates about procedural issues in the Faculty, and at the University. The committees ensure consistent operations among the portfolios. Further information about these committees can be found on the Faculty of Medicine Councils and Committees webpage.

Outside of the committees, members of the Faculty management structure work together on a daily basis in a variety of capacities, for instance with regard to finances, human resources, inter-departmental initiatives, space and infrastructure, etc.

Management of the MD Program portfolio

The MD Program is led by the Vice Dean MD Program, Dr. Patricia Houston. As described above, as a Vice Dean, Dr. Houston contributes to both the management and governance of the Faculty.

The Vice Dean chairs the MD Program Executive Committee, which consists of senior academic and administrative leaders. This committee is advisory to the Vice Dean with respect to the overall management and strategic directions of the MD Program.

The Curriculum Committee is chaired by the Vice Dean, MD Program. The Curriculum Committee has overall responsibility for the design, implementation, management and evaluation of the MD Program. The primary goal of the committee is to assure a learning experience which allows MD students to develop the knowledge, skills and attitudes that will prepare them optimally for entry into postgraduate programs and, ultimately, into medical practice. The committee is comprised of senior academic and administrative leaders, as well as broad representation from key stakeholder groups, including students.

The Curriculum Evaluation Committee is responsible for evaluating all aspects of the design, delivery and outcomes of the program curriculum, and delivering its findings and recommendations to Curriculum Committee. The Student Assessment and Standards Committee (SASC) is responsible for reviewing student

assessment and feedback methodologies utilized by individual courses, ensuring that suitable methods of standard setting are being utilized, and making recommendations on issues of policy related to student assessment and feedback. The Curriculum Evaluation Committee is chaired by the Director of Evaluations, while SASC is co-chaired by two faculty members. Both committees include a mixture of course directors, teachers, students and evaluation research scientists.

The Preclerkship/Foundations Committee and Clerkship Committee consist primarily of course directors, student representatives and selected senior academic and administrative leaders. These committees report to the Curriculum Committee and are charged with proposing, deliberating, and implementing broad curriculum decisions. Each course in the MD Program also has a course committee. Course committees bring together students and teachers from the course, particularly those who are heavily involved in course content development/delivery.

Student representation and student government

Student membership on MD Program committees

Medical students are full voting members on almost every MD Program committee, as indicated in the Committee & Portfolio Organizational Chart. This includes Curriculum Committee, the Preclerkship/Foundations and Clerkship Committees, all course committees, Curriculum Evaluation Committee and SASC. (The only exceptions are the three senior operational committees that are advisory to the Vice Dean: MD Program Executive Committee, Academy Directors' Committee, and the MedSIS Steering Committee.)

Student representatives are elected by their peers to represent student views on the committees and to relay information from committee proceedings back to the student body. See the *Statement on Student Representation on MD Program Committees (PDF)*.

In most cases, student representatives on committees also serve on either the Medical Society Executive Council or their class council (see below.)

MEDSOC

The Medical Society, commonly known as *MedSoc*, is the representative body of medical students at the University of Toronto. The Medical Society encompasses several types of membership, as outlined by its constitution:

- *General Members* are all students enrolled in the University of Toronto Faculty of Medicine MD Program, as well as MD/PhD students during the PhD phase of their program. Only General Members are voting members of the Medical Society.
- Upon graduation, students become *Alumni Members* of the Medical Society.
- Individuals who have made a significant contribution or long-standing support to the Medical Society may become *Honorary Members* as part of a voting process that is available every year to the students.

The Executive Council of the Medical Society consists of elected members who represent the views of all students. It consists of a President, a number of Vice-Presidents for a variety of portfolios, and two class presidents from every year of study and the MD/PhD program. The 34-member Executive Council meets regularly to conduct business arising in all aspects of medical student life. Each pair of class presidents is responsible for formulating and maintaining a council of representatives for the specific portfolios in their class.

The Medical Society also includes several Medical Society Affiliated Positions (MSAP) that are selected by the previous year's position holders in conjunction with the Executive Council. These are key positions that require an application and interview process. Medical Society Associated Clubs (MSAC) positions exist as well and are selected annually by each club's previous directors.

All relevant information, including the most recent copy of the Medical Society Constitution and Bylaws, as well as all key student contacts can be found on the MedSoc website, which also provides a forum for student discussion. If students have any questions or concerns, they may contact any of the Executive Council members.

Academies & training sites

Medical education involves a number of different learning experiences, necessitating a variety of teaching sites. The basic distinction is between didactic (classroom) teaching, which takes place to a great extent – although not exclusively – on the University campuses, and clinical teaching, which occurs primarily – although not exclusively – in hospital settings as described below.

On-campus teaching

Particularly in the first two years of the MD Program, a significant amount of teaching is conducted at the University of Toronto, on both the St. George and UTM campuses. All lectures and many seminars take place in the Medical Sciences Building in Toronto and the Terrence Donnelly Health Sciences Complex in Mississauga, and problem-based learning tutorials as well as some clinical skills teaching sessions also take place at UTM. Whole-class lectures which originate on the St. George campus are video-conferenced to the UTM campus, and vice-versa.

In Clerkship, students come together for on-campus teaching at the start of year 3 (Transition to Clerkship) and at the end of year 4 (Transition to Residency), again for both large-group and small-group teaching.

Clinical teaching: integrated medical education

'Integrated medical education' refers to the collaboration of a vast variety of hospitals and other clinical sites that are affiliated with the University of Toronto to provide students with a rich and diverse medical training experience.

The MD Program places Clerkship students in approximately 20 inpatient facilities and a large number of ambulatory sites. For the most part, these sites are located in Toronto or Mississauga, but some are elsewhere in the Greater Toronto Area (GTA); students also have the opportunity to complete selectives, electives, and the Family & Community Medicine clerkship rotation outside of the GTA.

Most clinical teaching is provided in the academic health science centres (sometimes called 'teaching hospitals'), but community hospitals – including Trillium Health Partners in Mississauga – are hosting an increasing proportion of students in all four years of study. The number and breadth of community sites is a strength of the MD Program, as they offer students a different perspective on patient care and often a different patient mix.

MD Program overview (YEARS 1 – 4)

The Academies

In a medical school of approximately 1,000 MD students and almost 30 affiliated hospitals, the program appreciates the value of a clinical 'home' where students can get to know the teachers, staff and other students around them. In addition, the first two years of study are heavily based on small-group learning opportunities which require appropriate resources, rooms, and clinical teaching facilities. The MD Program academies were created in 1992 for these reasons and have responded to the evolving needs of the undergraduate curriculum.

The four academies, which consist of clusters of both fully-affiliated and community-affiliated hospitals, provide the hospital-based portions of the curriculum in a supportive, student-focused learning environment. Each Academy offers unique and diverse strengths of their constituent hospitals and clinical sites, while maintaining a consistent standard of excellence in their educational role. Students are associated with their academy for the duration of their MD studies.

	FitzGerald Academy	**Mississauga Academy of Medicine**	**Peters-Boyd Academy**	**Wightman-Berris Academy**
Campus	St. George (Toronto)	UTM (Mississauga)	St. George (Toronto)	St. George (Toronto)
Hospitals	*Anchor hospital:* St. Michael's *Associate hospital:* St. Joseph's Health Centre	*Anchor hospital:* Trillium Health Partners (Credit Valley Hospital, Mississauga Hospital, Queensway Health Centre)	*Anchor hospital:* Sunnybrook Health Sciences Centre *Associate hospitals:* Women's College Hospital, North York General Hospital	*Anchor hospitals:* Mount Sinai Hospital, University Health Network *Associate hospital:* Michael Garron Hospital
Director	Dr. Molly Zirkle	Dr. Pamela Coates	Dr. Eugenia Piliotis	Dr. Jackie James
Number of students 2015-16	~54/year	54/year	~60/year	~91/year

For more information, see the Academies page on the MD Program website.

MD Program overview (YEARS 1 – 4)

The Academy model allows students to become well-integrated into their clinical community. Opportunities exist, however, for all students in both core clerkship rotations and electives and selectives to experience hospitals and ambulatory sites outside their Academy.

The Mississauga Academy of Medicine (MAM) is based at the University of Toronto Mississauga (UTM) campus while the University of Toronto's other three academies (FitzGerald, Peters-Boyd, and Wightman-Berris) are associated with the St. George campus.

Academy contact information

Academy	Academy Director	Medical Education Coordinator
FitzGerald	Molly Zirkle zirklem@smh.ca 416-864-5700	Caroline Pullen (St. Michael's) pullenc@smh.ca Sonya Surbek (St. Michael's) surbeks@smh.ca Chelsea Houde (St. Joseph's) choude@stjoestoronto.ca Kate Jackson (LInC Coordinator) jacksonkat@smh.ca
Mississauga Academy of Medicine	Dr. Pamela Coates pamela.coates@trilliumhealthpartners.ca 905-569-4617	Tamara Breukelman (Operations Manager) t.breukelman@utoronto.ca Angela Seto (Executive Assistant) mamexecutiveassistant@utoronto.ca Elizabeth Day (Year 1 & 2)) elizabeth.day@utoronto.ca Mark Wlodarksi (Student Support) mark.wlodarksi@utoronto.ca Frances Rankin (CPPH at MAM) frances.rankin@utoronto.ca Sara Reynolds (Clerkship) sara.reynolds@utoronto.ca Medical Education Office at Trillium Health Partners medicaleducation@trilliumhealthpartners.ca
Peters-Boyd	Dr. Eugenia Piliotis	Sonya Boston (Sunnybrook)

MD Program overview (YEARS 1 – 4)

Academy	Academy Director	Medical Education Coordinator
	eugenia.piliotis@sunnybrook.ca 416-480-4274	sonya.boston@sunnybrook.ca Margaret Chung (Sunnybrook) margaret.chung@sunnybrook.ca Jennifer Alexander (Women's College) jennifer.alexander@wchospital.ca Mabel Chan (North York General) mabel.chan@nygh.on.ca
Wightman-Berris	Dr. Jacqueline James jacqueline.james@sinaihealthsystem.ca 416-340-4832	Anne Marie Holmes (UHN Med Ed Manager) annemarie.holmes@uhn.ca Shamim Ladak (Mount Sinai) shamin.ladak@sinaihealthsystem.ca Lina Turco (Mount Sinai) lina.turco@sinaihealthsystem.ca Babita Jadobeer (Toronto General) babita.jadobeer@uhn.ca Adam Pereira (Michael Garron Hospital) medicaleducation@tegh.on.ca Joanne Mount (Michael Garron Hospital) j.mount@utoronto.ca Jenny Lam (Toronto Western) jenny.lam@uhn.ca Brian Davidson (CPPH at WB) brian.davidson@uhn.ca Katherine Brown (Bridgepoint) kbrown@bridgepointhealth.ca

Professionalism of MD Students

Being a professional is of course one of the key attributes of being a physician, and this is reflected by the prominence of the role of professional in the goals and competencies (See the MD Program goals and competencies).

In order to assist students in their development as future professionals, we provide students with abundant instruction and feedback, both formal and informal, about professionalism. Formal professionalism instruction is described in this handbook under the theme: Ethics & Professionalism. This section deals with expectations for students' professional behaviour.

In all teaching and learning settings where teachers are in a position to make meaningful observations about students' professional behaviour (including all small group settings such as ICE/ASCM tutorials, CBL tutorials, and CPPH tutorials, Portfolio and all Clerkship rotations), supervising faculty members complete professionalism evaluation forms. This assessment exercise provides an opportunity for teachers to point out to students, occasions when they fell short of expectations in their professional behaviour and also to indicate when they performed exceptionally well. Instances where faculty perceive students to require feedback are recorded as either:

- "minor lapses," where students fall short of expectations to only a minor degree;
- "major lapses," where the deficit is quite significant; or
- "critical incidents," which occur rarely, but are very important as they signify a situation where a student has put a patient or someone else at significant risk because of their behaviour.

These terms are described in greater detail below, under 'Frequently asked questions about student professionalism,' questions 7 and 8.

Ongoing professionalism assessment is useful to students for formative reasons (i.e., to provide them with feedback about areas for them to work on in order to ensure they meet expectations in future). It is also crucial, since it allows the program's leadership to monitor whether individual students are exhibiting a pattern of unprofessional behaviour, possibly across multiple courses or multiple learning contexts. In such a case, intervention such as remediation in professional behaviour may be required.

Frequently asked questions about student professionalism

1. How is professionalism evaluated in the MD Program at the Faculty of Medicine, University of Toronto?

a) Who completes the forms?

Professionalism evaluation forms are completed online by faculty. In the Foundations and Preclerkship curriculum, professionalism forms are completed by teachers who have had significant contact with students in small-group settings. In the Clerkship, forms are generally completed by the site supervisor for each rotation.

b) How are the professionalism forms completed?

Copies of the actual forms used are found elsewhere in this handbook. They evaluate several elements that contribute to professionalism. For each element, the faculty member can indicate that there were no lapses identified, that one or two minor lapses occurred, or that there were three or more minor lapses or a major lapse. Faculty members must provide comments that describe the lapses, if they indicate a minor or major lapse has occurred. At the bottom of the form, there is space for faculty members to indicate if there are any "areas of praise" and/or "areas of concern".

c) Are the professionalism forms monitored?

By having the evaluations online, the MD Program has the opportunity to monitor students' professionalism over time. This gives us the ability to identify a pattern of minor lapses and allows us to respond promptly, in the hope of preventing a more significant problem.

d) What happens if a student has several lapses noted?

When three or more evaluations with minor lapses are recorded, and the evaluations are approved and locked by course directors, a graded educational response begins:

- First response: E-mail from the Foundations, Preclerkship or Clerkship Director to acknowledge identification of professionalism learning issues and offer of assistance
- Second response: With continued minor lapses, students must attend a mandatory appointment with the Foundations, Preclerkship or Clerkship Director
- Third Response: With continued minor lapses OR with a first major lapse, a formal coaching program in professionalism is instituted
- Fourth response: With continued lapses, a meeting with the Vice Dean, MD Program, and consideration of referral to the Board of Examiners
- Fifth response: Referral to Board of Examiners and consideration of a permanent note on transcript or "Dean's letter" (Medical Student Performance Record), and other potential consequence.

2. Can anyone other than faculty members fill in a professionalism evaluation form?

Because students have significant contact with medical education administrative staff, these staff members may also fill in a form if they feel a student has significant learning issues related to professional behaviour. Forms can also be completed on behalf of community preceptors such as CCAC staff.

3. When the professionalism evaluation forms are completed and there is a tick for a lapse in an area, does that tick box show up on a student's transcript or 'Dean's Letter'?

No. The evaluation forms are mainly to be used for education and thus faculty will indicate lapses in order to identify areas that require improvement. All lapses will first be reviewed by the course director. The course director will ensure that clear comments are present for minor lapses, that sufficient evidence is presented for major lapses, and that the student has been notified. The course director when satisfied will approve and lock the evaluations. When a consistent pattern of minor lapse occurs over courses, the Preclerkship and Clerkship Directors are notified. They too have the ability to change the record if they have any concerns. If students persist with learning issues that do not respond to coaching, this eventually will lead to an assessment by the Vice Dean, MD Program. The Vice Dean will present to the Board of Examiners for advice on what to record on the student's transcript.

Information on professional misconduct appears on the student's transcript only if designated by the Board of Examiners and a comment on professionalism will only be put on the 'Dean's letter' (Medical Student Performance Record) by the Vice Dean. Hence evidence of lapses will be reviewed at least four times before any recordings can be put on the Dean's letter or transcript, and students have multiple opportunities to state their version of events before any such recording would occur.

4. What support is available to students with professionalism lapses?

Students who have had professionalism learning issues identified find this a stressful experience. As future professionals, they may feel quite threatened as if this is an attack on their character. The professionalism evaluation is intended to be educational **and** to identify serious concerns. The Associate Dean, Health Professions Student Affairs is available to help students to identify potential mitigating factors with their behaviour: illness, stress, family concerns among others, and can help to develop a plan to deal with these issues. The Associate Dean, Health Professions Student Affairs or their designate will be involved for students' support and will not be involved in any further evaluation process. Students will also be invited to submit their version of events to be considered. When the student's case is reviewed, consideration will be made to any systemic issues that may have influenced the student's behaviour and any such factors will then be addressed by the MD Program. If deemed necessary, a formal coaching program in professionalism will be offered so that the student is able to learn from the experience.

5. When the professionalism evaluation forms are completed, where are they stored and who has access to them?

The completed professionalism forms are considered confidential academic material and are thus handled in the same way as records of other academic marks. They only appear on the academic transcript or 'Dean's letter' after the process outlined in question 3.

6. Why are professionalism forms filled out on all students, and not just on those who have lapses? Would it not be more efficient to complete forms only when a lapse occurs?

The forms are primarily meant to be for educating students on proper professional conduct. Completing the forms provides an opportunity for faculty and students to discuss the student's behaviour and make recommendations for improvement. Completing the forms on an 'exception' basis would lose this educational process and focus solely on the punitive aspects of this process.

7. What is the difference between a "major" and a "minor" lapse?

The differentiation is context-specific and may vary from situation to situation. The main contextual issues are the student's underlying *intention* and motivation, and the resulting *impact* on others, including the patient, the student's colleagues, the community of practice and the student themselves.

A *minor* lapse is one that was committed inadvertently and/or did not cause any substantial harm. We recognize that we are all human and do make mistakes. The vast majority of mistakes are minor and if addressed properly can lead to improved professional conduct. A confirmed pattern of repeated minor lapses will trigger a staged educational response.

A *major* lapse is one when there is evidence of full knowledge that this action was not right and/or the lapse does cause harm. In such a case, the course director will follow up with the faculty member and student involved. They will be responsible for approving and locking the evaluation form, which may include changes if appropriate. A confirmed major lapse will trigger a staged educational response. Faculty should initially classify the lapse as being "major" or "minor" based on that person's perception of the event. Comments to direct learning or document major lapses must be provided. Decisions on major versus minor may change over time (be evolutionary) as the faculty reach consensus on these finer definitions of major versus minor.

8. What is a critical incident?

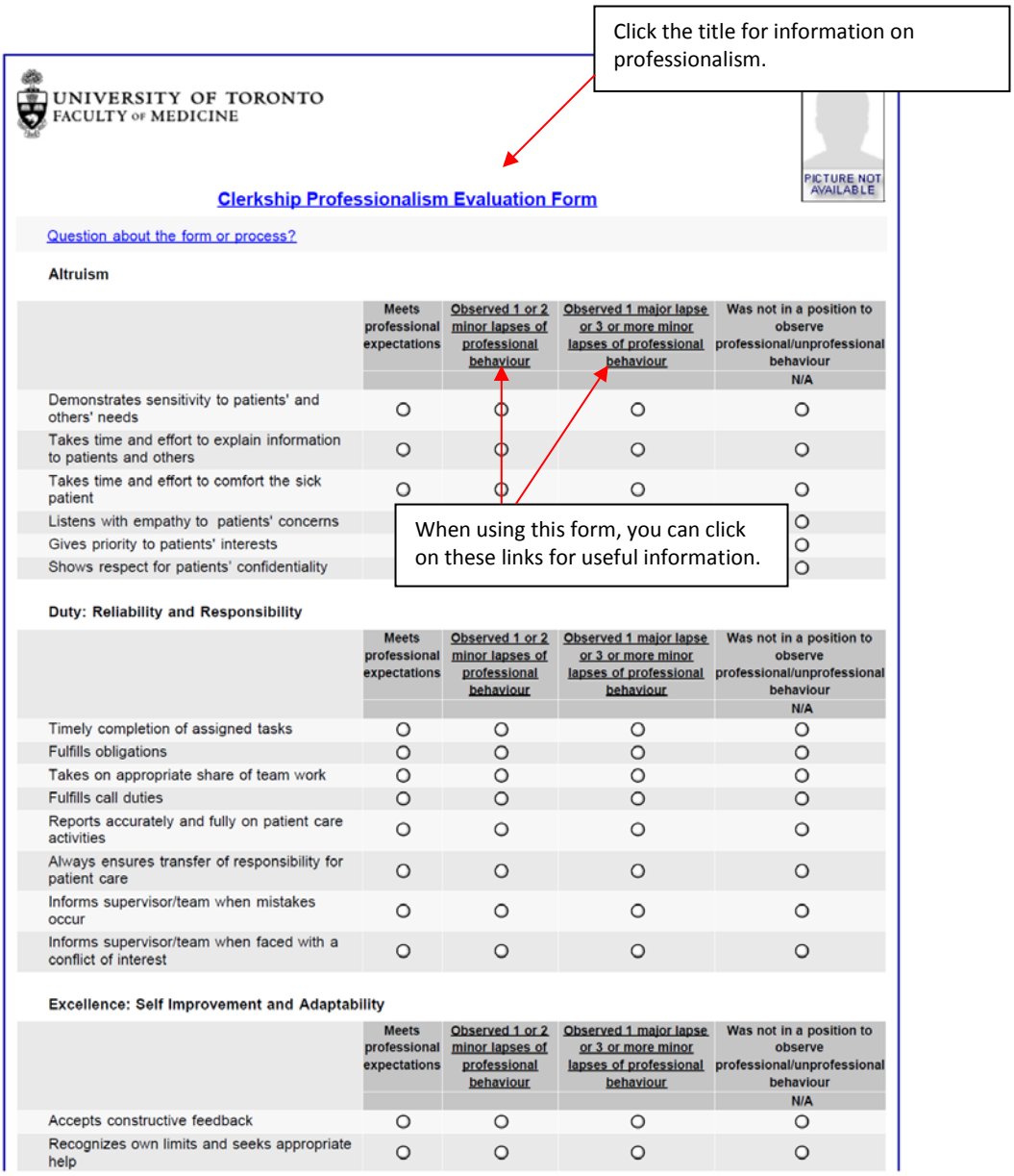
Critical events, as defined by the Task Force on Professionalism, are listed below. Any of these events require that faculty take immediate action in reporting these breaches to the course director as soon as possible. Faculty should also ensure patient and student safety at all times.

Critical incidents of unprofessional behaviour

- Referring to oneself as, or holding oneself to be, more qualified than one is
- Participating in a conflict of interest
- Theft of drugs
- Violation of the Criminal Code
- Failure to be available while on call
- Failure to respect a patient's rights
- Breach of confidentiality
- Failure to provide transfer of responsibility for patient care
- Failure to keep proper medical records
- Being disrespectful to patients and other professional staff
- Falsification of medical records
- Assaulting a patient
- Sexual impropriety with a patient
- Being under the influence of alcohol or drugs while participating in patient care or on call
- Any other conduct unbecoming of a practicing physician

MD Program overview (YEARS 1 – 4)

Sample professionalism form



Click the title for information on professionalism.

When using this form, you can click on these links for useful information.

UNIVERSITY OF TORONTO
FACULTY OF MEDICINE

PICTURE NOT AVAILABLE

Clerkship Professionalism Evaluation Form

Question about the form or process?

Altruism

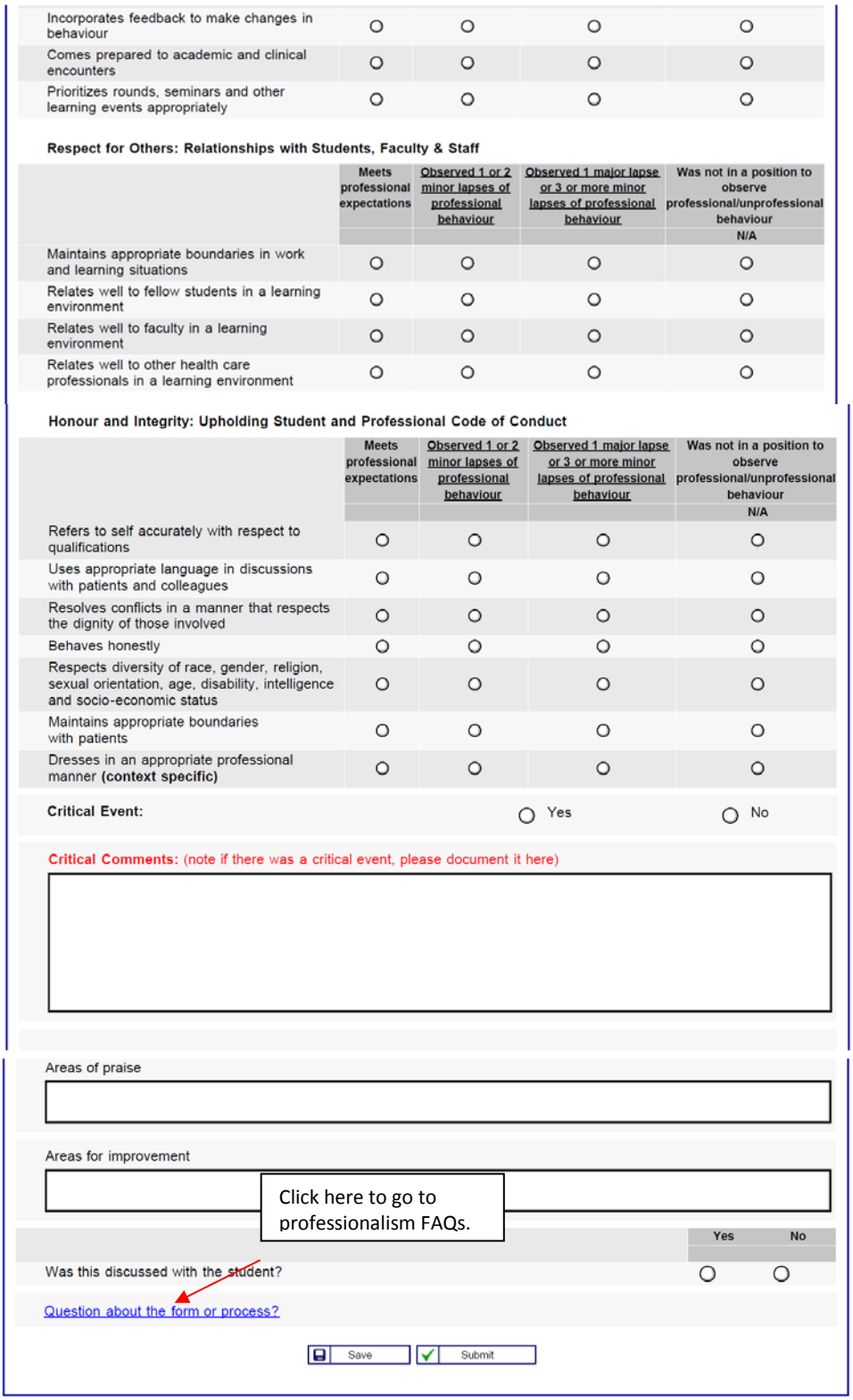
	Meets professional expectations	Observed 1 or 2 minor lapses of professional behaviour	Observed 1 major lapse or 3 or more minor lapses of professional behaviour	Was not in a position to observe professional/unprofessional behaviour N/A
Demonstrates sensitivity to patients' and others' needs	○	○	○	○
Takes time and effort to explain information to patients and others	○	○	○	○
Takes time and effort to comfort the sick patient	○	○	○	○
Listens with empathy to patients' concerns				○
Gives priority to patients' interests				○
Shows respect for patients' confidentiality				○

Duty: Reliability and Responsibility

	Meets professional expectations	Observed 1 or 2 minor lapses of professional behaviour	Observed 1 major lapse or 3 or more minor lapses of professional behaviour	Was not in a position to observe professional/unprofessional behaviour N/A
Timely completion of assigned tasks	○	○	○	○
Fulfills obligations	○	○	○	○
Takes on appropriate share of team work	○	○	○	○
Fulfills call duties	○	○	○	○
Reports accurately and fully on patient care activities	○	○	○	○
Always ensures transfer of responsibility for patient care	○	○	○	○
Informs supervisor/team when mistakes occur	○	○	○	○
Informs supervisor/team when faced with a conflict of interest	○	○	○	○

Excellence: Self Improvement and Adaptability

	Meets professional expectations	Observed 1 or 2 minor lapses of professional behaviour	Observed 1 major lapse or 3 or more minor lapses of professional behaviour	Was not in a position to observe professional/unprofessional behaviour N/A
Accepts constructive feedback	○	○	○	○
Recognizes own limits and seeks appropriate help	○	○	○	○



Incorporates feedback to make changes in behaviour	○	○	○	○
Comes prepared to academic and clinical encounters	○	○	○	○
Prioritizes rounds, seminars and other learning events appropriately	○	○	○	○

Respect for Others: Relationships with Students, Faculty & Staff

	Meets professional expectations	Observed 1 or 2 minor lapses of professional behaviour	Observed 1 major lapse or 3 or more minor lapses of professional behaviour	Was not in a position to observe professional/unprofessional behaviour N/A
Maintains appropriate boundaries in work and learning situations	○	○	○	○
Relates well to fellow students in a learning environment	○	○	○	○
Relates well to faculty in a learning environment	○	○	○	○
Relates well to other health care professionals in a learning environment	○	○	○	○

Honour and Integrity: Upholding Student and Professional Code of Conduct

	Meets professional expectations	Observed 1 or 2 minor lapses of professional behaviour	Observed 1 major lapse or 3 or more minor lapses of professional behaviour	Was not in a position to observe professional/unprofessional behaviour N/A
Refers to self accurately with respect to qualifications	○	○	○	○
Uses appropriate language in discussions with patients and colleagues	○	○	○	○
Resolves conflicts in a manner that respects the dignity of those involved	○	○	○	○
Behaves honestly	○	○	○	○
Respects diversity of race, gender, religion, sexual orientation, age, disability, intelligence and socio-economic status	○	○	○	○
Maintains appropriate boundaries with patients	○	○	○	○
Dresses in an appropriate professional manner **(context specific)**	○	○	○	○

Critical Event: ○ Yes ○ No

Critical Comments: (note if there was a critical event, please document it here)

Areas of praise

Areas for improvement

Click here to go to professionalism FAQs.

	Yes	No
Was this discussed with the student?	○	○

Question about the form or process?

Save Submit

For more information on professionalism assessment, see our policies page:
http://md.utoronto.ca/policies

Overview of Interprofessional Education (IPE) curriculum and requirements

Interprofessional education (IPE) is defined as learning with, from, and about other health professional students. The IPE curriculum was developed through collaboration between the Faculty of Medicine and ten other health science programs at the University of Toronto, under the auspices of the Centre for Interprofessional Education. For further information, please visit: http://ipe.utoronto.ca/

University of Toronto medical students are required to complete the IPE curriculum, which consists of the following components:

- Four core learning activities constitute part of the regular curriculum for all medical students:
    - Teamwork: Your Future in Health learning activity
    - Interfaculty Pain Curriculum during *Mechanisms, Manifestations, & Management of Disease*
    - Conflict in Interprofessional Life
    - IPE Component in Clinical Placement, which contains three components:
        - Shadowing (completed during TTC)
        - Team rounds (completed through Portfolio)
        - Team education (completed through Portfolio)
- Elective Learning Activities

  There are a large variety of these available each academic year. Details are available on each student's Portal page, under UT IPE Program/Curriculum. Elective learning activities vary in content and depth of immersion. These are classified into 'colours' dependent on the depth of immersion and competencies, where introductory (exposure) activities are 'red' and the more immersive activities are 'orange' and 'green'. The 'red' and 'orange' activities are weighted as 1 credit and the 'green' are weighted as 2 credits. Medical students who entered the MD Program prior to 2012 are required to complete a total of 2 elective learning activities (i.e., 2 'red' or 1 of the 'orange' or 'green'). For students who entered in fall 2012-2014, a total of four elective learning activities are required. Students who entered in fall 2015 must complete a total of 6 elective learning activities. The credits can be a combination of any colour. All students are required to complete the IPE curriculum by the end of the four-year MD Program.

  For details on elective learning activities offered within the IPE Curriculum, please see: http://ipe.utoronto.ca/curriculum/learning-activities-calendar/learning-activities-catalogue

Interprofessional Certificates of Distinction

Over the years, students and faculty have expressed an interest in longitudinal interprofessional relationships and learning experiences. As well, they have identified the value of engaging in enhanced opportunities within specific themes. Although the development of IPE competencies are embedded in the uniprofessional-professional programs and recognized by the Centre for Interprofessional Education, additional formalized learning activities will provide opportunities to enhance collaborative learning within particular areas of interest. The Interprofessional Certificates of Distinction are not a requisite component of the IPE Curriculum but are available to any student who is interested in broadening their exposure to IPE.

Upon completion of identified requirements within a themed certificate program, students will receive a Certificate of Distinction from the Centre for Interprofessional Education, University of Toronto.

Core Requirements

In order to receive a Certificate of Distinction, students must complete an introductory module or activity, a specified number of elective learning activities (recognized by the Centre for Interprofessional Education), a leadership/professionalism module or activity, and a group project with an outreach component.

Certificates of Distinction Areas of Interest

Interprofessional Management of Chronic Health Challenges

The Interprofessional Management of Chronic Health Challenges Certificate Program provides a deeper understanding of the complexity of health issues and best practices for addressing concerns in an interprofessional manner. When students learn with, from and about each other they are able to collaboratively determine how this new perspective will enhance team relationships and patient/client-centred care.

Interprofessional Health, Arts & Humanities

The Interprofessional Education Curriculum/Program, in conjunction with the Health, Arts and Humanities Program (http://health-humanities.com/) at U of T advances a deeper understanding of health illness, suffering, disability and the provision of health care by creating a community of scholars in the arts, humanities and clinical sciences.

A growing international literature has demonstrated that health professionals who seek out exposure to the humanities and arts-based learning improve their capacity to think critically and bring enhanced

sensitivity, curiosity and creativity to their work with patients/clients (Peterkin, 2008). They will learn to challenge personal assumptions and biases, to stretch their worldview and to become more reflective practitioners.

Humanities scholars can be enriched by an ongoing dialogue with colleagues from clinical disciplines and by having direct access to clinical/teaching settings which link to their areas of study or critical theory. They will be invited to help shape the discourse around perceptions of health and illness in our learning community and society at large. Although the central focus of the Program is on increasing the role of humanities in the provision of good patient/client care, another goal will be to widen its focus significantly by understanding health care in the context of the humanities.

Interprofessional Quality and Safety

The Interprofessional Quality and Safety Certificate Program advances a deeper understanding of quality process improvement, optimization of safe practices, prevention of adverse errors, team problem-solving and decision-making to provide client centred collaborative care by creating a community of scholars in the quality, safety and clinical sciences at U of T.

Research focused on team interactions indicates that interdisciplinary teams often fall short of the expectations of their members, clinical leaders, and managers (Pearson, 2001). The result is a practice environment that too often exhibits a lack of cooperation with disciplines defending their authority at the expense of the overall system – a process characterized as sub-optimization – resulting in patient suffering due to the lack of care continuity, redundant and wasteful processes, excess costs, and miscommunication (Larson, 1999; Institute of Medicine, 2001).

Most process improvement, measurement, or design activities necessitate interdisciplinary teamwork (Weingart, 1996). In most cases, clinicians cannot function on their own independent of a system. The complex needs of patient/clients with chronic health challenges, in critical acute care, in geriatric settings, or in care at the end of life necessitate smooth team functioning. Health professionals must be educated in a 'systems thinking' environment where they think of themselves as part of larger cross-functional teams dedicated to meeting the needs of patients/clients.

All health professionals will benefit from a study of quality and safety. When students learn with, from and about each other's professions in the context of quality and safety, they are able to collaboratively determine how this new perspective will enhance team relationships and patient/client-centred care.

For further information on the IPE Curriculum, see:
http://ipe.utoronto.ca/interprofessional-education-curriculum

For general inquiries, please contact us at: ipe.utoronto@utoronto.ca

The Continuum of Medical Education

The MD Program represents the first stage of a career-long process of medical education. The curriculum is intended to provide students with a diversity of opportunities to explore their career options and also emphasizes life-long learning and problem-solving skills that will serve medical trainees as they move through undergraduate medical education into residency and independent practice.

This section of the teacher handbook briefly describes the application process for entry to Canadian residency programs.

Application to postgraduate training programs

Choosing a residency program is a significant step for medical students, and the MD Program provides assistance in a number of ways. Both the Office of Health Professions Student Affairs (OHPSA) and the Academies offer confidential appointments to provide guidance to prepare students, and group information sessions are also available. Interest groups supported by various Clinical Departments are also an excellent source of information.

The process of application to postgraduate training is managed nationally by the 'Canadian Resident Matching Service' (CaRMS). In order to participate in the CaRMS process, applicants must have a medical degree or be in their last year of a degree from an appropriately accredited institution; furthermore, to be eligible for residency positions at the University of Toronto and other medical schools in Canada, applicants must be a Canadian citizen or have permanent resident status. In the autumn of fourth year of the MD Program, students submit to CaRMS a list of the postgraduate training programs for which they wish to be considered. The programs review the applications, and then offer interviews to their preferred candidates. The MD Program provides a three-week break in January of fourth year to enable students to attend these interviews.

In contrast to a typical 'application' process such as those used for academic programs, the residency match is intended to ensure that graduates are placed in a program that is aligned with their preferred career path as well as meeting the needs of the residency program. Therefore, following the interview

period, both students and residency programs submit rankings to CaRMS, and these lists are both used to determine the optimal placement or 'match' of every student across the country. CaRMS then notifies applicants of the results in March of the fourth year of the MD Program. Typically, the vast majority of University of Toronto students do match, but any unmatched candidates are able to enter a second round of matching, which is completed in April.

University of Toronto graduates historically perform very strongly in the CaRMS match for Canadian residency programs. However, the residency matching process is increasingly competitive across the country, and it is strongly advised that students avail themselves of all the career planning resources offered to them.

Our graduates enter the full spectrum of postgraduate training. In the last three years, for example, the graduating classes have matched to programs including family medicine, internal medicine, general surgery and surgical sub-specialties, and smaller proportions to a wide variety of programs, including paediatrics, obstetrics and gynaecology, anesthesia, diagnostic radiology, psychiatry, ophthalmology, otolaryngology, laboratory medicine, pathology, radiation oncology, emergency medicine, dermatology, neurology, community medicine, medical genetics, and physical medicine and rehabilitation.

Curriculum

The MD Program at the University of Toronto is one of the largest undergraduate medical education programs in Canada. We are proud to support and promote the development of future academic health leaders who will contribute to our communities and improve the health of individuals and populations through the discovery, application and communication of knowledge.

The U of T MD Program, like most North American medical schools, is four years in length. The final two years are known as the Clerkship (which involves learning while working with physicians and other health care team members in the hospital and clinic). The first two years of the program occur in laboratory, classroom, clinical, and community settings and are designed to prepare students for the work-place learning that occurs in clerkship.

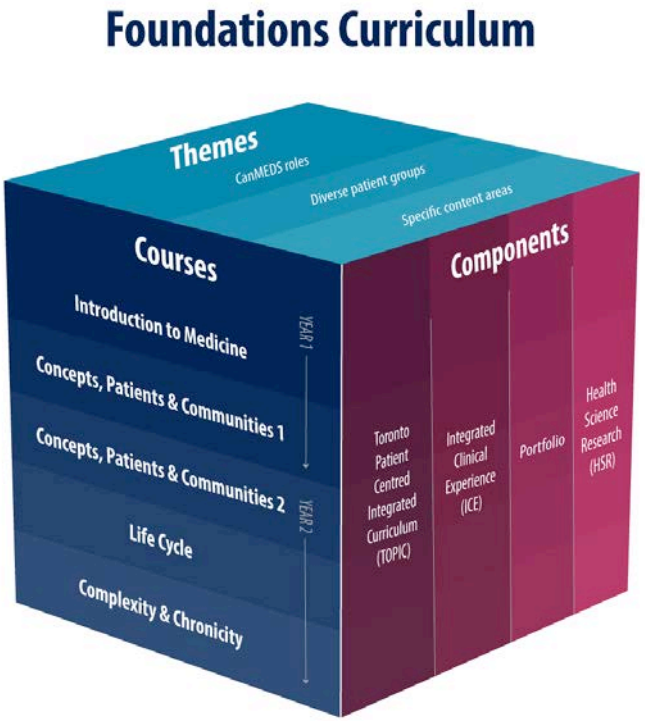
The 2016-2017 academic year marks the launch of the new Foundations Curriculum for students entering the program in 2016-2017. Students in second year in the 2016-2017 academic year will continue in the Preclerkship curriculum.

As a result of recent changes, the information regarding curriculum is divided into sections based on year.

Foundations Curriculum overview – YEAR ONE

Curriculum structure

The Foundations Curriculum runs throughout the first two years of the MD Program. There are three major dimensions to the Foundations Curriculum: courses, components, and themes. An important feature of the Foundations Curriculum is that each week has the equivalent of a full day that is unscheduled, and available for self-study, and special activities such as clinical skill development.



There are five courses in the Foundations Curriculum. Each course contains four components that run throughout. Longitudinal themes are interwoven throughout the entire curriculum. Courses include:

- **Introduction to Medicine:** 11-week unit at the start of first year
  An introduction to the basic and social sciences relevant to medicine, to cognitive science, to clinical skills and community health

- **Concepts, Patients and Communities 1**: 25 weeks in first year
  An instruction on health and the diagnosis and treatment of disease relevant to all of the body's systems, and includes a consideration of all of the major themes

- **Concepts, Patients and Communities 2:** First 16 weeks of second year
  A continuation of Concepts, Patients and Communities 1 (see above for description)

- **Life Cycle:** 9 weeks in second year
  An instruction on health and disease from conception, antenatal development, birth, infancy, childhood, adolescence, aging, and for patients who are dying

- **Chronicity and Complexity**: 11-week conclusion

A consolidation of the program with emphasis on chronic disease management, and complex problems with preparation for clerkship

See full descriptions of first year courses.

Course components

Throughout each course, there are four components through which content is delivered. These components include:

Toronto Patient-Centred Integrated Curriculum (TOPIC): In TOPIC, content is delivered through lectures, workshops, eLearning materials, anatomy labs as well as student-led and faculty-led case-based learning (CBL) sessions. In CBL, students work through a patient case in small groups of 8 – 10 students in two sessions each week: the first one is on their own, the second is with a tutor who is a faculty member. The majority of the faculty tutors are practicing physicians based at one of the GTA teaching or community hospitals. Over the 72 weeks, the cases introduce students to all aspects of clinical medicine. Each case describes a medical problem in a patient (or occasionally a family) and offers students the opportunity to learn material in a clinically relevant way while introducing them to the scientific and humanistic foundation for the theory and practice of medicine.

Learning about the cases is supported through carefully selected eLearning materials. Each week is introduced by a half-day during which a small number of lectures provide context for the issues addressed during the week. Another half-day consists of expert-led seminars or workshops which serve to provide further context and content. Every few weeks, there is a multi-disciplinary summary lecture to help pull it all together for students.

Many of the weeks include specific instruction on the longitudinal thematic issues (described below), such as medical ethics, leadership and collaboration with other health professionals.

Integrated Clinical Experience (ICE): ICE occupies two half-days per week. One half-day provides students with instruction in groups of six on how to take a patient's history and perform a physical examination.

The second half-day for ICE provides students with opportunities for early clinical exposure in a variety of settings, include doctors' offices, hospitals, community health agencies and home care visits. Throughout the Foundations Curriculum, students will be able to prepare for clerkship by spending time in clinical placement shadowing opportunities.

Portfolio: Students will spend a half-day every three to four weeks in a small group with a tutor in Portfolio. Portfolio focuses on two types of activities:

- Students will reflect on their previous experiences and their experience as first- and second-year medical students and the resulting effects on their professional development.
- Guided self-assessment: students will compile their formal assessments and the student's reflections and develop an individualized learning plan related to these assessments to ensure students are staying on track, and receiving help where it is needed.

Health Science Research (HSR): HSR was introduced in the 2015-16 academic year, and will continue in the Foundations Curriculum. It provides students with tutorial and eModule-based learning on two major topics:

- How to participate in health research projects.
- How to apply the findings of health research to patient care.

The course will also introduce students to well-known researchers working at the University of Toronto through its HSR Grand Rounds series.

Themes

Multiple thematic elements run throughout the two-year Foundations Curriculum, and provide integration longitudinally. There is content related to the themes delivered during the case-based learning integrated with the other issues addressed in the case, as well as dedicated sessions at other times to explore the themes in more depth. These themes are organized in three major categories:

- **Themes related to priority population groups**: These themes address the needs of groups which often have not received sufficient attention in the health care system, and include: indigenous health, health for those identifying as LGBTQ, geriatrics, and global health.

- **Themes related to CanMEDS roles**: The curriculum is organized around the seven CanMEDS roles of a physician, and several of these are amplified by dedicated theme-based teaching, including: the role as leader, as collaborator (with other health professionals), as health advocate, as professional, and as scholar.

- **Themes related to specific content areas**: These are topics that students have identified as needing particular attention, partly because they do not necessarily fit well with either the systems-

based or the life-cycle frameworks we are using, and include: medical imaging, pharmacology, nutrition, and humanities.

Themes

Geriatrics / Care of the Elderly

Theme Lead
Dr. Thiru Yogaparan tyogaparan@baycrest.org

The proportion of the population that is elderly continues to grow. People 65 years and older represent 16 per cent of the Canada's Population. Older adults 65 and over will double in numbers over the next 20 years and those over 85 will quadruple. At present older adults represent 40 per cent of hospitalizations and 60 per cent of hospital days in Canada. The elderly have unique health care needs and future physicians must be prepared to provide optimal care to them. Accordingly, a Care of the Elderly/Geriatrics theme has been established and a theme lead appointed during the 2014-15 academic year.

Geriatrics theme lead is responsible for the design, development, implementation, and evaluation of composite curricular elements in the MD Program to develop competencies in care of older patients. The purpose of this theme is to develop appropriate learning objectives that support the learning of core competencies related to geriatrics in light of the national geriatrics curriculum throughout the program. The geriatric theme lead works in collaboration with course directors and other theme leads to design appropriate learning activities that permit students to achieve these competencies. Assessment activities are also jointly designed to ensure students have, in fact, reached the required milestones. This theme will also develop a geriatrics hub.

LGBTQ Health Education

Theme Lead
Dr. Ed Kucharksi ekucharski@sherbourne.on.ca

The health disparities and unique health needs of the LGBTQ (lesbian, gay, bisexual, transgender, and queer) population are becoming increasingly recognised by public health researchers and the medical

community. Insufficient numbers of physicians competent in dealing with LGBTQ health issues have been identified as a substantial barrier to accessing care for these patients. In line with a commitment to the values of equality and social justice, the Faculty of Medicine is dedicated to addressing this issue.

The LGBTQ Health theme aims to equip students with the knowledge, skills, and attitudes necessary to provide clinically and culturally competent care to patients who are LGBTQ-identified.

The LGBTQ Health theme aims to incorporate innovative strategies to deliver relevant curriculum content in an interactive, dynamic and meaningful way. LGBTQ community members will be involved in many aspects of curricular development, delivery, and evaluation. Opportunities for interprofessional education will prepare students to care for members of marginalized populations as part of an interdisciplinary team.

Other ways that students may wish to supplement their competency in this domain include participation in electives and selectives in LGBTQ Health in various health care environments ranging from primary to quaternary. Additionally, opportunities will exist for students to complete LGBTQ-focused research projects.

We invite all students and faculty, LGBTQ and allies alike, to become involved in the ongoing development of LGBTQ-related curriculum through participation in the LGBTQ MD Program Advisory Committee and Community Liaison.Through fostering attitudes of appreciation for diversity and respect for difference, the Faculty of Medicine aims to create a climate in which all LGBTQ-identified faculty, students, and patients feel supported, included, and safe. Interested individuals should contact Dr. Kucharski directly.

Global Health

Theme Lead	Administrator
Dr. Rachel Spitzer rspitzer@mtsinai.on.ca	Sue Romulo sue.romulo@utoronto.ca 416-978-1831

Global health is a major focus of the Faculty of Medicine's 2011-2016 strategic plan, and an important facet of social responsibility, another major University theme and has a key place in the curriculum. Global health has been defined as "the area of study, research and practice that places a priority on improving health and achieving equity in health for all people worldwide" (Koplan JP, et al; Lancet. 2009; 373:1993-1995). According to the WHO, it is the health of populations in a global context and transcends the perspectives and concerns of individual nations. Thus, global health practice and endeavours can very

much take place within our own city and scope of practice or can be located in clinical practice, research, or public health endeavours taking place very far from home.

The Global Health theme focuses on integration and coordination of existing teaching in this subject area and on expanding it across the entire program. This will involve elements including identification of global health components in existing courses (such as MMMD), faculty development to enhance global health education opportunities, faculty input into the existing global health EEE course and input into the ongoing process of extensive curricular development and redevelopment. Further, it is the aim of this theme to support the initiatives of the student global health representatives to respond to student needs in regard to global health education. Finally, this theme will also include enhanced oversight of out-of-country opportunities, electives, and selectives for medical students. Pre-departure training and post-return briefing opportunities for students participating in educational experiences outside of Canada have been implemented under the Global Health. The theme lead works closely with the postgraduate global health lead to create coordination and consistency in the overall medical program.

Indigenous Health

Faculty Co-Leads	Administrator
Dr. Lisa Richardson lisa.richardson@uhn.ca Dr. Jason Pennington jpennington@tsh.to	Dawn Maracle indigenous.medicine@utoronto.ca 416-946-0051

The Indigenous peoples of Canada (First Nations, Metis, and Inuit) face health inequities when compared to the general population. The Faculty of Medicine is committed to addressing this issue. Training physicians with the appropriate knowledge and skills to better serve the Indigenous population is a cornerstone to success. Furthermore, it is part of recommendation #24 of the Truth & Reconciliation Commission.

Aboriginal Health issues and concepts are being integrated throughout the curriculum. The first formal introduction will occur in Community Health Week of Foundations where topics include*: Traditional Indigenous Concepts of Health (The Medicine Wheel), Health Status, Historical and Political Influences on Health and Health Care Delivery* and *The Social Determinants of Aboriginal Health*.

Incorporating the concept of Cultural Safety into the curriculum is a key step to nurture appropriate clinical skills. Developed by Maori health care practitioners who noted that cultural factors play a role in health disparities, Cultural Safety uses self-reflection as a tool to advance therapeutic encounters. Although it was created for care models in Indigenous communities, Cultural Safety can be applied to all therapeutic encounters; it is especially beneficial as a concept to guide students' interactions with marginalized patients or in difficult clinical scenarios. While it is introduced in ICE: Clinical Skills and Foundations, Cultural Safety and anti-oppression must be fostered throughout medical training and maintained as a practicing physician. A self-reflective approach is the hallmark of our innovative selective in Urban Indigenous Health.

There are many other exciting ways in which students are able to become involved in Indigenous Health. The student-run Aboriginal Health Elective has been a great success. There are also opportunities for Indigenous community based CBS placements and summer research projects. Electives and selectives in a variety of Aboriginal populations (reserve, rural and urban) are possible thanks to partnerships with NOSM and numerous Aboriginal organizations and communities.

We understand that these are new concepts to the MD Program curriculum. We have developed some introductory materials and webinars available online. Please feel free to contact us, or the office if you have any questions. The office of the Indigenous Health Program is located in MSB, Room 2354.

Ethics & Professionalism

Faculty Lead	Administrator
Dr. Erika Abner erika.abner@utoronto.ca	Joan McKnight joan.mcknight@utoronto.ca /416-946-8719
Mississauga Academy of Medicine (MAM) Faculty Site Coordinator	
Dr. Rob Boyko rboyko@cvh.on.ca	

Teaching in professional ethics in the core curriculum includes a mix of large-group sessions and seminars/workshops. The large-group sessions give students familiarity with the central concepts of medical ethics, professionalism and medical jurisprudence. Some of these sessions are given by single lecturers, others are team-taught, and some involve multidisciplinary panels and patients. Ethics seminars are expert-led and case-based, and sometimes involve the participation of standardized patients.

Ethics & Professionalism is woven throughout the MD program. Ethics teaching addresses topics pertaining to the individual doctor-patient encounter (e.g., confidentiality, truth-telling, obstetrical and paediatric ethics, informed consent, euthanasia and assisted suicide, and breaking bad news). There is also teaching on issues such as public and private rights, social justice, and professionalism.

Also see the handbook Professionalism of MD Students section.

Leader (formally Manager)

Faculty Lead	Administrator
Dr. Isser Dubinsky isser.dubinsky@utoronto.ca	Susan Rice s.rice@utoronto.ca 416.978.2188

The Leader theme curriculum spans the length of the MD Program, and so provides an opportunity for students to learn in progressively greater depth about the various aspects of the role of the physician as a leader in the health care system. The objectives for the Leader role are contained within the overall MD Program competencies.

Collaborator / interprofessional education

Faculty Lead	Administrator
Dr. Mark Bonta mark.bonta@uhn.ca	Susan Rice s.rice@utoronto.ca 416.978.2188

Interdisciplinary collaboration is an integral component of health care and is associated with improved patient outcomes. Analysis of interprofessional collaboration in acute and primary care settings describes a myriad of benefits for both patients and health care professionals. The benefits include: reduced length of stay and costs, enhanced patient satisfaction, treatment compliance and patient-reported health outcomes.

Moreover, members of the health care team report greater job satisfaction and sense of well-being when working in a collaborative fashion. This understanding, coupled with the inherent complexity of health care systems in an era where we must provide care to an aging population of persons with multiple chronic diseases has led to international consensus that models of health professions education must change in

order to create a collaborative, practice-ready workforce. Recognizing this, the World Health Organization (WHO) published a framework for action on interprofessional education (IPE) in which it outlined supporting evidence and strategies for implementing IPE into various health care disciplines to achieve this goal. According to the World Health Organization (WHO, 2010), IPE occurs when students pursuing education in two or more professions learn about, from, and with each other to enable effective collaboration and improve health outcomes. Governments and health professions faculties worldwide, including the University of Toronto, have endorsed this move.

In the context of the CanMEDS competencies, the guiding principles of IPE are similar to those defined by the Collaborator competency. The Collaborator objectives, which are found in the overall MD Program competencies, are fulfilled by the learners through participation in a variety of theme-specific sessions across the the curriculum. One of the chief ways in which this educational content is delivered is via the formal IPE curriculum.

Interprofessional Education (IPE)

The IPE curriculum has been developed for students from 11 University of Toronto health professions Departments and Faculties (Dentistry, Medical Radiation Sciences, Nursing, Occupational Therapy, Pharmacy, Physical Education & Health, Physical Therapy, Physician Assistant, Social Work, and Speech-Language Pathology, as well as the MD Program), and is delivered under the auspices of the Centre for IPE. To complete the IPE curriculum, students take part in both core and elective learning activities throughout the program.

The core activities over the four years of the MD program can include:

- a large-group session with all new health professionals that introduces the concept of collaborative practice;
- a week-long session on the multidisciplinary approach to the management of pain ;
- a Conflict in Interprofessional Life workshop; and
- a Palliative Care Session

Students should reference the UT Interprofessional Education (IPE) Program/Curriculum on the portal for specific program-year requirements.

Students are required to complete a variety of IPE elective learning activities during their four years of training that expose them to different aspects of their role as collaborators. The students select experiences from a catalogue of various learning activities that range in topic, depth of immersion and specific IP competency addressed. Examples of IPE electives include an afternoon workshop on medication

safety, various lectures from non-physicians and patients, panel presentations, and immersive clinical experiences with learners from other health care faculties. The formal IPE elective experiences are complemented by their interactions with other health professionals during clinical training in Clerkship, during teamwork sessions, and educational sessions delivered by educators from other health professions during their clinical rotations.

See overview of Interprofessional Education (IPE) curriculum and requirements.

Clinical Skills

Faculty Lead	Administrator
Katina Tzanetos katina.tzanetos@uhn.ca David Wong (Director, Foundations Clinical Skills) wongdav@smh.ca	TBD Bektu Abidta bektu.abidta@utoronto.ca

The clinical skills theme encompasses a patient-centred approach to medical interviewing and counseling, physical examination and clinical reasoning. As such, this theme includes much of what a physician must master and as students, you will be supported throughout your training to acquire these skills. The curriculum will be developmental, aligned and integrated across years and courses. Teaching will be a focus of Clinical Skills I, and you will have an opportunity to practice further during clinically-based observerships.

In order to meet the needs of students who will likely develop their clinical abilities at different rates, students will be able to access additional coaching as necessary. These opportunities will include, but not be limited to, work with student-run clinical skills interest groups and expert, dedicated volunteer faculty through the Clinical Skills Coaches Program. Students who are identified as needing remedial attention on the basis of their performance within courses, rotations, or on examinations, will be referred to the Clinical SCORE Program for more structured and intensive support.

Clinical Pharmacology & Therapeutics

Theme Coordinator
Dr. Cindy Woodland

cindy.woodland@utoronto.ca

Toronto Online Patient Centred Curriculum (TOPIC)

During week 9 of the Introduction to Medicine course, students are introduced to pharmacokinetic and pharmacodynamic principles. Throughout TOPIC, students learn about medications relevant to the systems being addressed (e.g., endocrine, cardiovascular, gastrointestinal, etc.). Learning occurs via introductory lectures, online materials, case-based learning, seminars, and assignments.

Integrated Clinical Experience (ICE)

Students are provided with a list of commonly prescribed medications that they are likely to encounter during this and future courses. In Week 9, students practice conducting a medication and substance use history and discuss natural health products and drug-drug interactions.as they address a number of clinical cases.

Medical Imaging / Diagnostic Radiology

Theme Coordinator
Dr. Elsie Nguyen elsie.nguyen@uhn.ca

The medical imaging theme is explored throughout the four years of the MD Program. In the first two years of the program, you learn about radiologic anatomy, have the opportunity to deepen your learning of anatomy through the use of ultrasound which is used to teach abdominal and musculoskeletal anatomy and are introduced to neuroradiology through lectures and problem-based learning tutorials.

Health Advocacy

Theme Lead
Dr. Philip Berger philip.berger@utoronto.ca

Health Advocacy is a newly developing curriculum initiative for the Faculty of Medicine that was formally launched on January 1, 2014 with the appointment of an Advocacy Lead and the establishment of an Advocacy Advisory Reference Group which includes student representatives. The Faculty is seeking to fully integrate the teaching of advocacy into the undergraduate curriculum in a manner consistent with the

2015 revised CanMEDS role for advocacy which states that advocacy requires action, and physicians contribute their knowledge of the determinants of health to positively influence the health of the patients, communities, or populations they serve and that physicians support patients, communities, or populations to call for change, and they speak on behalf of others when needed.

Beyond the traditional annual lecture on advocacy delivered to first year students and popular workshops on poverty and advocacy skills which have been available for several years, an accredited CPPH Community Based Service advocacy project was implemented in February 2015. The project called AMI (Advocacy Mentorship Initiative) pairs students as mentors with clients of Big Brothers/Sisters Toronto. The 2014 inaugural Longitudinal Integrated Curriculum (LInC) for clerks held at the FitzGerald Academy constituted a formal advocacy project as part of the curriculum and was extended to the other academies in 2015. All first year students are provided the opportunity to spend a half day at a homeless shelter under the supervision of a physician from the Inner City Health Associates.

The Advocacy Lead is available as an advisor to any student who is pursuing an advocacy activity such as the nearly 40 students who organized the 2015 fourth National Day of Action opposing cuts to refugee health care.

The intent of these activities in the advocacy portfolio is to spread the teaching of advocacy into all aspects of undergraduate education from the seminar rooms to the hospital wards.

Medical Psychiatry

Theme Lead
Dr. Sanjeev Sockalingam sanjeev.sockalingam@uhn.ca

Our health system often divides mental health from physical health into distinct silos of care and treatment, yet no such mind-body duality exists in actual patients. Many individuals with chronic health conditions simultaneously experience mental health issues - and the reverse - and as such "concurrent" health challenges are far from uncommon.

Therefore, integrated approaches to healthcare are needed to respond to these growing healthcare needs. The theme of Medical Psychiatry (physical and mental healthcare) was developed in response to the growing healthcare needs and challenges in caring for patients with both physical and mental health

conditions. It will teach students how to understand and engage patients using a patient-centered approach in a variety of settings. The content will build on Clinical Skills teaching and provide opportunities to practice therapeutic communications and to understand experiences of patients who are living with complex medical, physical and social issues. The Medical Psychiatry theme will extend from case-based learning activities, core lectures, and simulation experiences across the program. It will also be integrated into clerkship experiences including through longitudinal integrated clerkships, where students will receive training in psychiatry, internal medicine, pediatrics and family medicine in an integrated, longitudinal rotation rather than sequential rotations. Clinical experiences related to this theme will focus on improving therapeutic communications, navigation of patient care, advocacy and exposure to integrated care models.

In parallel, University of Toronto faculty members will be trained at partner hospitals through Medical Psychiatry continuing professional development programs to support students' development of knowledge, skills and attitudes in this area.

This theme is part of a larger healthcare system and education initiative called the Medical Psychiatry Alliance (MPA). For more information about MPA click this link: http://www.medpsychalliance.ca/Pages/default.aspx

Community, Population and Public Health

Theme Lead	Administrators
Dr. Allison Chris allison.chris@utoronto.ca	Roxanne Wright roxanneb.wright@utoronto.ca Yasmin Shariff yasmin.shariff @utoronto.ca Sylvia Jao sylvia.jao@utoronto.ca Frances Rankin (MAM) frances.rankin@utoronto.ca

Community, Population and Public Health (CPPH) is a theme in Foundations curriculum. CPPH sessions are situated in Integrated Clinical Experience (ICE) and TOPIC in Year 1 and Year 2. The CPPH theme continues

in clerkship, particularly during Transition to Clerkship and Transition to Residency. Jointly, The CPPH theme will introduce students to a population and community health perspective on medical practice.

CPPH fosters the development of future physicians' responses to changing community and societal needs and concerns. As a result of completing the course work in CPPH, U of T medical graduates will have the foundation of necessary knowledge, skills and attitudes to form appropriate alliances with patients, other healthcare professionals and community organizations to the benefit of the individual patient and community as a whole. Their practice will be population-health oriented and evidence-based. They will be aware of factors and resources needed to promote health and wellness and be able to integrate this knowledge effectively into clinical practice.

CPPH objectives are linked closely with the CanMEDS Roles and the Medical Council of Canada 'Medical Expert' Objectives in Population Health.

In first year students are introduced to the theme in both the TOPIC and ICE Components of the Foundations Curriculum. In their first course, Introduction to Medicine, students will have CBL cases and supporting educational activities in Weeks 10 and 11 that focus on the CPPH theme. In addition throughout the year they will participate in community placements in schools and accompany community-based health professionals to patients' home to experience community based care.

Towards the end of first year, students will embark on a Community Based Service Learning Activity (CBS), a longitudinal field experience that starts in the spring of CPPH-1 and concludes at the end of CPPH-2. Students are partnered with a community organization where they engage in meaningful work, while answering questions connected to topics in community and population health. Students will share their CBSL experience at an Academy-based forum.

Educational Learning Modalities

The students' weekly learning experience will consist of some of the following learning modalities:

Pre-Week Preparation (PWP)

These are online resources (e.g., readings, recorded short videos, websites, etc. to support basic learning outcomes of the week). Students are expected to study these materials prior to the lectures at the start of the week. Lecturers will quiz the class on the PWP materials to identify learning gaps for further discussion during lectures. This is a form of 'flipped-classroom' – the students are expected to be prepared before coming to lectures for a more engaging discussion with the lecturer.

Lectures

There are three live and recorded lectures on the first day of each content week (9 a.m. to noon). Specific learning outcomes that are supported by the PWP materials will be covered. Specific learning outcomes that will support the Case-Based Learning (CBL) to be held immediately afterwards will also be covered in the lectures. These lectures will be designed to be engaging (e.g., incorporating the use of audience response system, or a form of Jeopardy contest, or using patient or clinician panel) instead of the traditional didactic style. Lecturers will be guided to make the lectures engaging.

CBL Case

It is a virtual patient online module that outlines the case of the week. A group of 8-10 students will go through the CBL module on campus, without a faculty tutor, immediately after lectures at the beginning of the week. The students follow the journey of a patient (or a family) navigating the health care system in the case. They will explore the trigger questions, patient-directed questions, resources, videos, imaging, EMR screenshots, and lab results findings etc. in the case. In addition, there are around 10-15 questions that the group will have to answer and submit to the faculty tutor by the end of this self-guided group session.

During the week, the students will independently explore the resources (e.g., guidelines, clinical skills videos, etc.) embedded in the CBL module to solidify their understanding.

Towards the end of the content week, the same group will attend a 2.5-hour CBL session with a faculty tutor at the academies (note: each group will have a longitudinal relationship with a few faculty tutors.). The faculty will review the answers with the group, challenge their thinking, answer questions (tutor-guide for the case will be provided by the content experts), and present other similar cases to help the students transfer their knowledge to other contexts. The tutors will also identify any confusing or challenging concepts remaining at the end of the session and inform the central teaching team. These concepts will be discussed further at a later time in the Integrated Summary & Application Lecture (described below).

Integrated Summary & Application Lecture

Scheduled at the end of every sub-section. These lectures provide an opportunity for faculty to summarize how content has integrated throughout the sub-section, and teach about any confusing or challenging concepts identified throughout the sub-section. A patient may be invited.

Self-Learning Module (SLM)

There are specific learning outcomes not covered by the modalities listed above and would be suitable for a self-learning module in the form of an online case, e-module, short recorded video, or practice exercise with answers. Students will go through these SLM during the week. Their completion of these SLM will be tracked online (if possible). Their knowledge acquisition from these SML will be assessed (i.e., self-assessment and/or end-of-week quiz).

Anatomy Labs

Traditionally, Anatomy is taught in a block at the beginning of year 1. In the Foundations Curriculum, anatomy labs will be scheduled throughout the 2-year curriculum. The Anatomy learning outcomes will be planned with the content experts of the specific weeks to fully integrate anatomy into the curriculum. Students will be expected to prepare for the lab with digital anatomy apps and videos, and attend anatomy labs at the 2 campuses to explore dissections, prosections, and anatomical models. There will be assessments every few weeks during anatomy labs using tools such as MCQ or bell-ringers.

Clinical Decision Making Workshops (CDM)

The purpose is to provide active learning opportunities for students to practice applying their knowledge and skills to variety of clinical cases, reinforce what was covered in the other modalities listed above, and to build their clinical decision making skills. Students meet in groups of 15 or fewer at the academies or centrally.

Skills-based Workshops

The focus of these workshops is to learn and practice a specific clinical skill within a clinical context including, when relevant, learn how to communicate about the situation to the patient and family (e.g., ECG workshops).

Longitudinal Theme Seminars

These seminars, usually held centrally on campus, are led by a faculty or a panel of experts including non-physician experts. They will discuss with the students a particular longitudinal theme (e.g., ethics, leadership).

Longitudinal Theme Lectures

These lectures, held centrally on campus, are led by a faculty or a panel of experts including non-physician experts. They will discuss with the students a particular longitudinal theme (e.g., ethics, leadership).

Clinical Skills Sessions

Students learn the clinical skills of interviewing, history-taking, and physical examination, as well as how to interpret the data in a diagnostic formulation, and then document and present it. Instruction takes place in groups of five to six students, with one tutor (or occasionally two tutors) per group. The tutors are responsible for teaching the basic clinical skills to the students, who often initially practice the skills on each other or sometimes on 'standardized patients'. The students are assigned particular tasks in each tutorial, and the tutors are responsible for observing the students' performance and correcting any deficits. The key learning activity of each tutorial involves students interviewing and examining patients. They receive feedback from their tutors throughout the courses, based on both direct observation and submitted written work.

Portfolio Sessions

There are six Portfolio sessions in each academic year to allow students to reflect and discuss key subjects relevant to their experiences as medical students, linked to the educational content and activities of their other courses.

Community, Population and Public Health (CPPH) Lectures, Tutorials & Community Visits

CPPH curriculum includes three types of field experiences: School visits, Community Care Access Centres and home visits, and community-based organization experiences. There are also CPPH tutorials, which provide students with an opportunity to present and reflect on the field experiences. In addition, CPPH lectures will be used to deliver CPPH material as well.

Experiential Learning

Throughout ICE, there will be opportunities for experiential learning. This will include interactions with standardized patients, real patients, and role-play (simulation of a health care provider encounter). Experiential learning will allow students to develop skills (i.e., communication), receive feedback in a safe environment, overcome anxiety related to speaking in front of others, inform future career decisions, enhance students' learning of clinical medicine, and gain insight into the patient experience.

Foundations Curriculum courses – YEAR 1

Foundations Curriculum Contacts

Course	Directors	Course Administrator
Introduction to Medicine	Elenor Latta	Lina Marino lina.marino@utoronto.ca
Concepts, Patients & Communities 1	Lori Albert	Lina Marino lina.marino@utoronto.ca

Introduction to Medicine

Welcome to Introduction to Medicine (ITM), the first of five integrated courses that constitute the two-year Foundations Curriculum. ITM is an eleven-week course that provides incoming medical students with both a welcome and orientation to the MD Program curriculum, its program competency framework, and teaching approaches, as well as an introduction to the essential knowledge, skills and attitudes necessary to the practice of contemporary medicine. ITM provides students' with their 'on ramp' to a four year journey, the goal of which is achievement of the MD Program's key and enabling competencies.
ITM provides students with:

- a broad introduction to the language and culture of medicine;
- a solid preparation in foundational and social sciences, and humanities for further study in later courses;
- a basis for the development of professional behaviours among students and between students and the teaching staff; and
- an introduction to theories of medical education and integrated learning approaches.

Like the subsequent four Foundations courses, ITM comprises four longitudinal curricular components: Toronto Patient Centred Integrated Curriculum (TOPIC); Integrated Clinical Experience (ICE); Health Sciences Research (HSR); and Portfolio – as well as a number of longitudinal themes divided into three categories – specific content areas, diverse populations, and CanMEDS roles.

ITM has four distinct sections: Molecules, Genes, and Chromosomes; Cells, Tissues, and Organs; The Whole Person; and, Family, Community, & Society. Together these four sections represent the depth and breadth of the knowledge base necessary to medical expertise. Within these sections, each week of ITM has its own overarching focus focused on a specific aspect of medical practice ranging from genetics to population health. Patient-centred clinical cases are used to bring together foundational disciplines

relevant to the study and practice of medicine, in a manner that promotes their cognitive integration by students. Each course week has its own objectives and assessments that contribute to the overall course objectives and final assessment, as well as to student achievement of the MD Program key and enabling competencies.

Teaching methods include student and faculty-led case based learning, e-learning resources and activities, anatomy labs, lectures, clinical skills sessions, community based activities, theme-based tutorials, Portfolio group meetings and workshops.

Students also have the equivalent of one day per week that is available to them for self-learning activities.

In ITM, students are assessed through a variety of methods, many of which are for the purpose of self-assessment and formative feedback, while others contribute to an integrated assessment at the end of the course, which will be used for the purpose of assessing student readiness to progress to the next year of the program. The Foundations Assessment section provides a detailed description of the types of assessments, and the standards required for students to progress through the MD Program.

Weekly integrated topics

Week	Section	Week Topic
1	Molecules, Genes, Chromosomes	Genes
2	Molecules, Genes, Chromosomes	Chromosomes
3	Molecules, Genes, Chromosomes	Biochemistry
4	Cells, Tissues, Organs	Cell Biology
5	Cells, Tissues, Organs	Tissues and Organs
6	Cells, Tissues, Organs	Embryology
7	The Whole Person	Growing Up
8	The Whole Person	Lifestyle
9	The Whole Person	Pharmacology
10	Family, Community, Society	Family & Community
11	Family, Community, Society	Society

Foundations Curriculum courses – YEAR 1

Overarching course objectives

The overarching course objectives, organized according to CanMEDS roles are listed below (the letters and numbers in brackets following each objective refer to the MD Program's Terminal Key Competency that is supported by the course objective.

On completion of ITM, students should be competent to:

Professional

- Explain the major concepts of bioethics, professionalism and law in medicine and demonstrate a developing sense of how to apply these to clinical practice when approaching ethical and professional dilemmas. (P1.1, P1.3, P3.1)
- Demonstrate a growing sense of the role of the physician as a professional, including the contribution of reflective practice to professionalism. (P1.1, P2.1, P4.1)
- Recognition of physician accountability to patients, society (P2.1)
- Exhibit honesty, fairness and compassion towards patients, peers, and other members of the health care professions (P1.1, P3.1)
- Recognize the physician as patient (P4.3)
- Maintain confidentiality of patient data (P1.1)
- Recognize the role of professionally responsible use of technology-enabled communication and social media in healthcare (P1.5)
- Create a plan to enhance resilience in medical training, identifying specific priorities and strategies (P4.1, P4.2)
- Manage time and workload effectively (P4.2)

Medical Expert

- Describe the structure and function of the human body, at both the gross and microscopic levels (with reference to genes, chromosomes, molecules, cell biology, tissues and organs) relevant to a future physician. (ME1.2)
- Describe the early development of the embryo, with an emphasis on congenital anomalies relevant to a future physician. (ME1.2)
- Interpret radiologic images of normal human structures, and begin to appreciate the role of medical imaging in diagnosis of disease. (ME1.2, 3.2)
- Recognize when to suspect a genetic condition (ME1.2, 2.2,2.3, 2.5)
- Recognize when to suspect developmental delay (ME1.2,2.2,2.3,2.5)
- Describe the theories of aging (ME1.2,5.1)

- Describe the epidemiology, etiology and pathogenesis of cancer (ME1.2, 5.2,5.6)
- Describe and recognize strategies for screening, diagnosing and treating cancer (ME2.4,2.5, 3.3, 5.2,5.6)
- Describe the process of human reproduction (ME1.2)
- Describe laboratory testing techniques (ME1.2, 2.4)
- Identify key developmental milestones (ME1.2, 2.3)
- Describe the principles of pharmacology, including pharmacokinetics and pharmacodynamics (ME 1.2,3.2)
- Describe and assess the health of individuals and populations, and to assist in the diagnosis of disease using epidemiological methods and data and other appropriate information sources (ME 5.6)
- Describe how the determinants of health affect the health of a population and the individuals it comprises (ME 5.1)
- Describe how public policy impacts the health of the population served (ME 5.2, 5.4)
- Describe population level assessment and interventions (ME 5.1, 5.4, 5.6)
- Understand the goal and principles of infection control (ME 1.2)
- Perform a physical examination (ME2.3)
- Obtain a patient's medical history (ME2.2; Comm2.1)

Health Advocate

- Understand efforts to reduce health inequities in clinical practice and at the population level, locally and globally (HA1.2,,1.3,2.2, 2.3)
- Identify the unique health needs and barriers to access to appropriate health and social services of specific populations, including but not limited to persons of Indigenous descent, immigrants, refugees, persons with disabilities and persons identifying as LGBTQ (HA1.2, 2.1, 2.2,2.3)
- Identify methods of advocacy to improve the health and wellbeing of individuals and describe how to advocate effectively to improve population health (HA 1.1, 1.2, 1.3,2.2)
- Identify tensions that can arise between individual and population advocacy (P1.3)
- Participate in community activities directed at improving health (HA1.1, 1.2, 2.1, 2.2)
- Assess the health status of individuals and of populations in terms of the impact of determinants of health (HA 1.1, 2.1)

Scholar

- Recognize philosophical perspectives on knowledge (S3.1, 3.3,4.1,4.4)
- Identify resources available for different kinds of questions/contain different types of information (S3.2, 3.3,,4.4)

- Develop a rational strategy for keeping up-to-date on drug information (S1.1, 3.2)
- Demonstrate appropriate self-directed learning skills and critical thinking. (S1.1, 1.2,)
- Assist in teaching others and facilitating learning where appropriate. (S1.3, 2.1,2.4, 2.5,2.6,4.5)
- Understand the impact of power/justice/culture/privilege on learning and evidence generation (S2.1, 3.3,4.2)

Communicator

- Communicate effectively with patients during an interview, both verbally and non-verbally, so as to obtain accurate information that the patient is comfortable providing (Comm1.1, 1.2,1.4)
- Present the findings from the history and physical examination orally and in writing (Comm5.1, 5.2, 5.4)
- Demonstrate an understanding of the limitations of technology in the physician-patient interaction, as well as methods to overcome those limitations (Comm5.2)
- Exhibit a non-judgmental, patient-centred approach to the doctor/patient interaction, in order to promote the physical, emotional and social well-being of patients (Comm 1.1, 1.2,1.3,1.5, 1.6,3.1)
- Acquire orientation to communication skills and workplace learning (Comm 1.1,1.2, 3.1,5.3, 5.4;S1.1, 1.2,2.1,2.2,3.1,3.2,3.4)
- Recognize the role of narrative medicine on reflective capacity (Comm1.1, 2.2;P4.1)
- Describe the components of the medical history, with reference to difference age groups (Comm 2.1,2.3; ME2,2)
- Describe effective counselling techniques (Comm 1.6,3.1,3.3;ME3.1)

Collaborator

- Recognize and be introduced to the role of the Inter-professional Care team (Coll1.3)
- Describe how to establish partnerships with community-based agencies and public health in support of the care of individuals and populations (Collab1.1,1.2; HA2.1, 2.2)
- Understand the roles played by the physician, public health and community-based agencies in the health system (Coll1.2; HA2.2;L1.1)

Leader

- Introduction to CanMEDS Leader role (L1.1, 3.1,4.1,4.2)
- Describe the governance, structure, financing, and operation of the Canadian health care system (L1.1)
- Develop a deeper understanding of the physician's role as a manager, of how to work effectively in teams, of how teams sometimes do not work well, and of the phenomenon of leadership (L1.3, 3.1;Coll1.1, Coll1.3, 1.4,3.2,3.1, 3.2)

Foundations Curriculum courses – YEAR 1

Concepts, Patients & Communities 1

Concept, Patients & Communities 1 (CPC 1) is the second of the five courses that constitute the two-year Foundations Curriculum. It is the first of two courses, both named Concepts Patients and Communities (1 and 2 respectively) that employ the organizing structure of the human body's physiological systems to offer students an integrated approach to clinical medicine. CPC 1 takes place during the final 25 weeks of first year. CPC 2 takes place during the first 16 weeks of second year.

Divided into three themes – Host Defence; Oxygen Delivery; and Metabolism and Homeostasis – CPC 1 follows the same curricular structure as Introduction to Medicine, integrating the four major components of Foundations: Toronto Patient Centred Integrated Curriculum (TOPIC); Integrated Clinical Experience (ICE); Health Sciences Research (HSR); and Portfolio as well as a number of longitudinal themes divided into three categories – specific content areas, diverse populations and CanMEDS roles.

In CPC 1 normal physiology, normal health, and mechanisms of disease (the pathogenesis and disease-induced changes at the tissue, cellular and molecular levels, together with their clinical correlations) are woven into each week's clinical scenarios, providing an underlying framework for student learning about prevention, diagnosis and treatment.

As in Introduction to Medicine, each week of Concepts, Patients & Communities 1 has its own overarching theme focused on a specific aspect of medical practice ranging from microbes to heart disease. Patient-centred clinical cases are used to bring together foundational disciplines relevant to the study and practice of medicine, in a manner that promotes their cognitive integration by students. Each course week has its own objectives and assessments that contribute to the overall course objectives and final assessment, as well as to student achievement of the MD Program's key and enabling competencies.

Teaching methods include student and faculty-led case based learning, e-learning resources and activities, anatomy labs, lectures, clinical skills sessions, community based activities, theme-based tutorials, Portfolio group meetings, and workshops.

Students continue to have every Wednesday throughout the course available to them for self-learning activities.

In Concepts, Patients, & Communities 1, students are assessed through a variety of methods, many of which are for the purpose of self-assessment and formative feedback, while others contribute to an

integrated assessment at the end of the course which will be used for the purpose of assessing student readiness to progress to the next year of the program. The Foundations assessment section provides a detailed description of the types of assessments, and the standards required for students to progress through the MD Program.

Weekly integrated themes

WEEK	SECTION	THEME
1	Host defence	Microbiology
2	Host defence	Microbiology
3	Host defence	Immunology
4	Host defence	Immunology
5	Host defence	Dermatology
6	Oxygen delivery	Hematology
7	Oxygen delivery	Hematology
8	Oxygen delivery	Cardiovascular
9	Oxygen delivery	Cardiovascular
10	Oxygen delivery	Cardiovascular
11	Oxygen delivery	Cardiovascular
12	Oxygen delivery	Respiratory
13	Oxygen delivery	Respiratory
14	Oxygen delivery	Respiratory
15	Metabolism & homeostasis	Endocrine
16	Metabolism & homeostasis	Endocrine
17	Metabolism & homeostasis	Endocrine
18	Metabolism & homeostasis	Endocrine
19	Metabolism & homeostasis	Gastroenterology
20	Metabolism & homeostasis	Gastroenterology
21	Metabolism & homeostasis	Gastroenterology
22	Metabolism & homeostasis	Gastroenterology
23	Metabolism & homeostasis	Kidney/Urinary Tract
24	Metabolism & homeostasis	Kidney/Urinary Tract
25	Metabolism & homeostasis	Kidney/Urinary Tract

Foundations Curriculum courses – YEAR 1

Overarching course objectives

The overarching course objectives, organized according to CanMEDS roles are listed below (the letters and numbers in brackets following each objective refer to the MD Program's terminal key competency(ies) that are supported by the course objective.

On completion of CPC1, students should be competent to:

Professional

- Manage their time effectively. (P1.4, 4.2)
- Demonstrate responsibility and reliability in the learning and performance of tasks. (P1.4, 4.1, 4.2)
- Demonstrate respect for instructors and peers within the educational environment, while providing them with relevant and effective feedback. (P1.1; Coll1.1, 3.1; S1.3, 2.5, 2.6)
- Demonstrate a basic understanding of major concepts in bioethics and law as applied to medicine, and apply this understanding to challenges in clinical medicine. (P1.1, 1.5,3.1)
- Recognize and accept the limitations in his/her knowledge and clinical skills, and demonstrate a commitment to continuously improve his/her knowledge, ability and skills and leadership, always striving for excellence. (P1.3, 4.1; ME 1.3, 1.4; L3.1)
- Demonstrate a deepening understanding of the doctor-patient relationship and the legal and ethical issues pertaining to it (P1.1, 1.3, 1.8, 3.1,)
- Demonstrate an expanding capacity for reflective practice, and use of external feedback to develop a personal learning plan (P 1.2, 4.1; S1.1, 1.2)

Medical Expert

- Describe current concepts of normal physiology and health, the mechanisms of disease, including etiology and pathogenesis, in relation to: the body systems explored in CPC 1: i.e. Immunology, microbiology, dermatology, hematology, cardiovascular and respiratory disorders, endocrine disorders, gastroenterology, and disorders of the kidney and urinary tract. (ME 1.2)
- Describe how structural alterations of disease correlate with clinical manifestations in relation to the body systems explored in CPC 1 (ME 1.2)
- Describe common and/or life-threatening diseases relevant to the body systems explored in CPC 1 in terms of their: etiology, pathogenesis, clinical manifestations, complications, treatment, prevention (ME1.2)
- Provide an approach to the differential diagnosis of the major presenting problems in clinical medicine (with particular reference to the body systems explored in the course), and how to manage these problems pending the identification of the underlying cause. (ME 1.2)

- Describe the treatments of disease and illness in terms of their rationale, the mechanism of their effects, indications for each, and side effects, with reference to: management plans; pharmacotherapeutics; counselling and education; and, where relevant, transfusion, Intravenous fluid therapy, organ donation and transplantation, rehabilitation, and palliative care (ME1.2, 3.2)
- To be able to describe important drug classes utilized in the management of the disorders described in the course and their mechanisms of action. (ME 1.2, 3.2)
- Describe the etiologic agents, pathogenesis, clinical presentation, diagnostic tests, treatment, modes of transmission, and control measures involved in each of the following infectious disease syndromes taking into account antimicrobial and laboratory stewardship: pneumonia (ME 1.2, 3.2, 5.3; L 2.1, 2.2)
- Describe social determinants of health related to indigenous health (ME 1.2, 1.3, 5.1, 5.2, 5.6; HA1.1, 1.2, 1.3, 2.1,2,3)
- Describe the impact of aging on the prevalence, presentation, and treatment of disorders relevant to the body systems explored in the course.
- Describe an approach to management of patients with chronic disease (ME 1.2, 2.1,3.2; Coll 4.1))
- Make appropriate use of medical imaging in the diagnosis of relevant disorders of the various body systems (ME2.4)
- Demonstrate growing competence in the gathering and interpretation of clinical data, including:
- Taking a history, performing a physical examination (ME 2.2, 2.3)
- Selecting and interpreting laboratory and imaging tests (ME 1.2, 2.4)
- Creating a problem list, generating a differential diagnosis and a provisional diagnosis (ME 2.5)
- Demonstrate how to obtain a brief screening occupational history as part of the routine history for all patients (ME 5.1; HA 1.1)
- Retrieve, analyze and synthesize current data and literature in order to help solve a patient problem. (ME 5.6, S 3.2, 3.3, 3.4)
- Integrate best research evidence with clinical expertise and patient values in making (ME 1.3, 1.4; S3.1, 3.4)

Health Advocate

- Propose health promotion and disease prevention strategies for individuals and populations based on an understanding of disease mechanisms (HA 1.1, 1.2, 1.3, 2.1, 2.2; ME 5.1, 5.2)
- Demonstrate respect for diversity (HA 2.3)
- Recognize the importance of an occupational health history and occupational disease with reference to determinants of health (HA 1.3, 2.1,2.2).

- Explain the public health measures used to control the transmission of infectious disease (vaccination, post-exposure prophylaxis, reportable diseases, contract tracing, self-isolation/quarantine, outbreak investigation) (HA 1.1, 1.3, 2.1, 2.2; ME 5.2, 5.3)

Scholar

- Demonstrate increasing self-directed lifelong learning skills (S 1.1, 1.2,1.3,3.2,3.3)
- Demonstrate a growing capacity to teach others (peers and patients) about clinical issues (S1.32.54.5)
- Identify resources available for different kinds of questions/contain different types of information (S3.2)
- Describe the difference between two research/knowledge paradigms: objectivism and constructivism (S 3.1, 3.3; ME 1.4)
- Recognize the centrality of interests and values in shaping all research (S3.1, 3.3; ME 1.4)
- Describe evidence-based medicine approach (ME 1.2, S 3.2, 3.3, 3.4, 4.1)
- Describe how knowledge is appraised (ME 1.2, 1.3, 1.4; S3.2, 3.3, 4.1)

Communicator

- Demonstrate advanced communication and interview skills in challenging contexts (Comm 1.1, 1.3, 1.5, 3.1)
- Elicit sensitive aspects of the patient's history respectfully and in a manner consistent with patient dignity, privacy and safety (Comm 1.2)
- Understand and apply to the clinical interview the concepts of cultural safety, cultural awareness, cultural sensitivity, and cultural competency (Comm 1.1, 1.2, 3.1)
- Accurately communicate relevant history and physical examination findings (Comm 5.1, 5.4)

Collaborator

- Describe in general terms the roles and regulatory frameworks of other members of the health care team. (Coll 1.3)
- Identify sources of team dysfunction and an approach to management (Coll 3.2, 3.3, 3.4, 3.5, 3.6)
- Identify the impact of team dysfunction on patient safety (Coll 3.5)

Leader

- Describe the importance of the commitment to patient safety and quality improvement as core daily activities for all physicians (L1.2, 1.3, 1.4, 1.5)
- Describe regulation, legislation, safety culture, systems thinking, human factors (L1.3, 1.4)
- Further develop a general understanding of the resource costs of health care interventions, and the importance of resource stewardship. (L2.1)
- Understand the optimal use of laboratory testing in relation to cost issues (L 2.1)

- Describe infection control strategies in clinical medicine and quality improvement, and their role in disease prevention (L 1.3)
- Help to build better teams (L 3.1)
- Describe physician performance management models (L 1.2, 3.1)
- Describe aspects of the organization of the health care system (L 1.1)
- Begin to formulate a career plan (L2)

Grading system & assessment of students in Foundations

Students are assessed in different ways throughout the program. It is important to understand both the purpose of each assessment and the expectations for competence on each occasion. If you have any questions about an assessment, please contact your course director or supervising teacher/tutor.

Transcripting practice

All courses in all four years of the MD Program at the University of Toronto are transcripted Credit/No Credit (CR/NC), which is commonly referred to as 'Pass/Fail' at other institutions. This policy was introduced beginning with the 2009-2010 academic year.

The CR/NC approach to transcription of grades is congruent with our competency-based curriculum and approaches to student assessment. It is also in line with the trend in grading policy across Canada.

A note about numerical results: A number of individual assessments may be given a numerical mark or score, which is shared with the student. These results will never appear on transcripts or other documentation provided by the MD Program to external individuals or organizations.

Furthermore, the MD Program will calculate numerical grades for each course for the purpose of informing the recipients of academic awards and identifying students whose performance is below expected standards and who may therefore require either completing a focused learning plan, remediation, or repetition of a course or year. These confidential numerical final grades will never appear on transcripts or other documentation, but will be reserved exclusively for internal use.

According to MD Program policy, individual teachers are also prohibited from disclosing students' numerical marks or assessment results in reference letters or other documentation.

What information about student grades is sent to CaRMS when students apply for postgraduate training programs?

The MD Program sends three types of information:

1. The transcript of course grades, indicating whether the student received 'Credit' or 'No credit' for each course in the first three years of the MD Program. Individual components are not listed.
2. The Medical Student Performance Record (MSPR, also known as the 'Dean's Letter'), which provides a summary of the student's ratings in each of the competencies for each of the clerkship rotations of two weeks' length or greater, based on their final clinical evaluation form. (See Clinical Performance Evaluations below)
3. A statement that the student has met the medical school's expectations regarding professional behaviour.

Grading regulations

Each course assesses students on at least two occasions, as required by University policy. The methods of assessment used in the various courses are described below under *Assessment Modalities*. Course directors are responsible for selecting both appropriate assessment modalities to best measure how students perform in relation to the program and course objectives, and appropriate criteria for students at this level of training.

A number of assessments receive a numerical mark while others are simply denoted 'Credit' or 'Non-Credit'. For numerical assessments, 70% is generally a passing grade.

Successful completion of a course: A grade of 'Credit (CR)' in a course will be recommended to the Board of Examiners if a student:

i. has satisfactorily completed all marked assessments for each of the four components as well as those for the longitudinal themes that constitute the course, AND
ii. has performed satisfactorily on any required learning activities in that course (including but not limited to professionalism and logging of clinical experiences in courses where this is relevant).

Details and exceptions are provided in the official descriptions for each course.

Furthermore, students must demonstrate satisfactory professional behaviours, as described in the Professionalism section.

Outcomes of course assessments

The Standards for grading and promotion of undergraduate medical students in the Foundations Curriculum (PDF) and Guidelines for assessment of undergraduate medical trainees in academic difficulty-Foundations Curriculum (PDF) are available on the MD Program website (www.md.utoronto.ca/policies). Briefly, there are several possible outcomes in relation to a student's status at the conclusion of a course:

- **Satisfactory Progress** is used to denote that all requirements in the course are being met. Credit for the course will be recommended to the Board of Examiners at the end of the academic year pending satisfactory completion of all course assessments, including those for all longitudinal components and themes that constitute a course, and barring the availability of new information that calls into question the student's successful performance in the course.

- **Partial Progress** is used to denote that a student has not yet demonstrated satisfactory progress in one or more longitudinal components and themes that constitute a course, and has been required to formulate a Focused Learning Plan. Upon achievement of satisfactory progress on their Focused Learning Plan, the student's provisional course grade in MedSIS will be changed from Partial Progress to Satisfactory Progress. Partial Progress is an interim, internal notation that does not appear on official documentation.

- **Unsatisfactory Progress** is used to denote that a student has not been successful in completing the course due to not satisfactorily completing all marked assessments or not performing satisfactorily on any non-marked learning activities, and/or if formal remediation has been assigned by the Board of Examiners. The final course grade recommendation to the Board of Examiners will depend on the student's history of academic difficulty. Unsatisfactory Progress is an interim, internal notation that does not appear on official documentation.

- **CR (Credit)** is used to denote that all requirements in the course have been met. This is the grade that will be recommended to the Board of Examiners at the end of the academic year, barring the availability of new information that calls into question the student's successful performance in the course.

- **NC (No Credit)** is used to denote that a student has not been successful in completing the course due to not satisfactorily completing all marked assessments or not performing satisfactorily on any non-marked learning activities. The recommendation to the Board of Examiners will depend on the student's history of academic difficulty. An interim notation of Unsatisfactory Progress is used to denote if formal remediation has been assigned by the Board of Examiners.

- **INC (Incomplete)** is used to denote that a student has not completed/submitted certain requirements of the course (marked or non-marked assessments), as arranged with the appropriate curriculum leader(s). Upon completion of the assessments, a provisional MedSIS course grade and final grade recommendation will be determined.

Board of Examiners: All academic programs in the Faculty of Medicine have a Board of Examiners, a standing committee of Faculty Council. All final decisions related to a MD student's standing and promotions are made by the Board of Examiners, a standing committee of the Council of the Faculty of Medicine. To inform these decisions, the Board of Examiners receives recommendations from the Student Progress Committee, represented by the Foundations Director and/or Director of Student Assessment, and the Faculty Lead for Ethics & Professionalism. The Board of Examiners consists of 13 members, including two students. The Board of Examiners is responsible for approving all course grades, and makes the ultimate decisions about student promotion, requirements to do remedial work, and dismissal from the program, e.g. for repeated failures of an entire year or egregious lapses in professionalism. Students have the right to appeal decisions made by the Board of Examiners.

Criteria for graduation: In order to graduate from the program, students must achieve a standing of 'Credit' in every course, based on the requirements of each course. They must also have satisfactory professionalism evaluations.

Assessment modalities

The following descriptions capture the major types of assessment employed in the Foundations Curriculum.

- **Multiple-choice examinations**
  - Weekly feedback quizzes: short quizzes delivered through SofTest that students will complete at home each week. While low stakes, these will help students examine how well they have learned the week's material.
  - Mastery exercises: one-hour exercises which are completed in class. Students bring their own computer devises to take the exam in class on Monday morning on SofTest software. These exercises take place every one to three weeks, with flexibility in spacing depending on course structure, and carry more weight in determining if student has been successful in a course. Questions examine how well concepts are integrated and applied. Some questions will be cumulative – asking students to apply concepts from various courses or contexts.

- **Objective Structured Clinical Examination (OSCE)**
  OSCEs are station-based clinical skills examinations in which students rotate through a series of rooms. At each station, students are required to simulate a real clinical encounter with a Standardized Patient (an actor playing a patient) who is assigned a particular case, while being observed by a faculty examiner. Students are expected to complete specific tasks and, towards the end of each station, may be asked a small number of questions by the examiner. Students are given a global rating on each OSCE station. Examiners may also complete a checklist documenting the student's performance on all aspects of the station (for instance, their skills on certain manoeuvres, their communication with the patient, etc.). OSCEs are considered to be more reliable than simple clinical oral examinations because they present each student with identical cases, and because the number of stations translates into assessment of a broader array of tasks and scenarios. A standardized marking scheme specific for each case is used.

- **Evaluation forms**
  Forms completed by tutors or teachers provide formative feedback on various course and components elements. There are various types of evaluation forms:
  - **Professionalism forms**: forms completed by tutors in every course and course component in the Foundations Curriculum. Student professionalism is assessed in all small-group and clinical activities. In each course, students are required to demonstrate satisfactory professionalism in order to receive credit. The evaluation forms are completed on MedSIS and prompt the tutor or supervisor to record any lapses in professionalism that the student has made. A small number of minor lapses are considered a normal part of a student's development, but a larger number of lapses, patterns of repeated lapses across courses, or more serious incidents are carefully reviewed by the MD Program. After a teacher has completed a scheduled professionalism evaluation, the student will receive an automated e-mail at the appropriate time from medsis.server@utoronto.ca with instructions to log in and review the evaluation. See the Professionalism section for details.
  - **Student contribution forms**: forms used to assess student contribution and participation and are delivered through MedSIS.
  - **Case reports**: detailed reports of the symptoms, signs, diagnosis, treatment and follow-up of an individual patient. Case reports may contain a demographic profile of the patient, but usually describe an unusual or novel occurrence. These are delivered through MedSIS.
  - **Clinical performance evaluations/ clinical encounter cards**: short forms intended to provide formative feedback on elements of the ICE course component, based on a clinical encounter

with a focus on the patient-centred aspects of care. These are delivered through MedSIS.

- **Short-answer questions**
  These are generally used in combination with multiple-choice questions on written examinations. They require the student to demonstrate a thorough understanding of the topic at hand and ability to reason through a problem. They are usually composed and marked by teachers with specific content expertise.

- **Written assignments**
  Written assignments range in scope and purpose across the program. While the specific objectives of these assignments vary, they generally do involve an assessment of the student's ability to communicate effectively in writing, including presenting their findings or argument in a logical, well-organized manner.

- **Oral presentations**
  These are a key component of small-group learning in the Foundations, in particular in the ICE Clinical Skills course component (as case reports), or in the CPPH course component, in which they relate to the students' experiences in community field visits. Students also make presentations to their teachers and classmates in other settings such as Portfolio sessions and CBL tutorials.

- **Anatomy laboratory assessments**
  These are exercises that occur in the form of bell ringers and take place in the laboratories where students go to multiple stations, view a specimen or image and identify structures or answer brief questions about function.

- **Progress tests**
  A form of comprehensive knowledge-based test in various domains (basic, social, clinical, humanistic). This is an exit-level test that assesses the targeted competency upon completion of the program. The test will be used to illustrate students' progress throughout the program.

- **Thematic reflections**
  These are written reflections that outline how students see themselves developing in their role as medical students. These reflections must all be submitted at various points throughout the year through the OASES system.

Foundations Curriculum assessment technology

The Foundations Curriculum utilizes a number of systems to manage student assessment and are administered by the Office of Evaluations and Assessment.

All require a UTORID to access.

MedSIS (Medical Student Information System) is the online system that the MD Program uses to maintain student registration information, record and calculate student assessments by teachers, obtain student feedback on their teachers and courses, and perform course scheduling. Students can view their course schedules, review and complete evaluations and access grades.
medsis.utoronto.ca
Support: medsis@knowledge4you.com

OASES (Online Assignment Submission and Evaluation System) is an online tool for written assignments, allowing students to securely upload documents and evaluators to provide feedback. Students will use OASES to submit their portfolio reflections and other written assignments.
oases.med.utoronto.ca
Support: Contact course administrator

SofTest is the application the MD Program will be utilizing for multiple-choice examinations – weekly feedback quizzes and mastery exercises. SofTest is installed on the student's laptop and the exams and questions are downloaded a few days prior to the exam. Once the exam is completed, the answers must be uploaded to the server for marking.
To download: https://www.examsoft.com/utorontomed
Support: http://support.examsoft.com/h/

The Learner Chart is a one-of-a-kind application that chronicles and guides students' progress throughout the MD Program. The Learner Chart will be populated with assessment information from MedSIS, OASES and SofTest to provide a rich and holistic view of student progress. At the same time, it allows students to upload files – from documents to images – that tell their unique story of how they are demonstrating competency. Academy Scholars will have access to students' Learner Charts to support students in reflecting on their assessment data and encourage focused dialogue on what learning strategies students may need to take to enhance their performance, with the ultimate goal of developing a personal learning plan for each student. learnerchart.med.utoronto.ca

Support: md.progress@utoronto.ca

CPLAN is a curriculum planning tool developed during the implementation of the Foundations curriculum. It houses the MD Program's learning objectives and allows the Program leadership to create linkages between end of week objectives, end of subsection objectives and broader Program competencies. CPLAN is what allows the Learner Chart to architect the assessment data it receives by learning objective and CanMEDS roles. Students will not have direct access to CPLAN but will see it reflected in the Learner Chart.

Technology Requirements

All incoming MD Program students are required to have laptops/tablets consistent with the specifications below in order to use the assessment delivery software (ExamSoft) provided by the U of T MD Program. Our new medical school curriculum relies on recently developed technology for the delivery of teaching, learning, and assessment activities. The technology is user-friendly and meant to enhance your learning. You will be oriented on how to engage with this technology when you join the program.

To assist you with determining if your device meets the minimum recommended requirements, we would like you to download SofTest to your personal laptop or iPad and write a practice test to ensure that the application works, and that you are familiar with the SofTest interface. Visit and bookmark the ExamSoft student portal here: www.examsoft.com/utorontomed. System requirements for SofTest are regularly updated and posted on the ExamSoft website.

If you encounter issues running SofTest on your device, contact ExamSoft Support.

For those who may want to explore purchasing a new laptop or tablet at the University of Toronto Bookstore, please visit http://uoftbookstore.com/ for the latest offers.

PC Requirements

Component	Minimum Recommended Requirements	Notes
Operating System	Operating System: 32-bit and 64-bit Versions of Windows 7, Windows 8, Windows 8.1, and Windows 10	Only genuine, U.S.-English, French, Portuguese, Swedish, and British versions of Windows Operating Systems

		are supported
Processor (CPU)	CPU Processor: 1.86Ghz Intel Core	2 Duo or greater View a list of supported processors
Memory (RAM)	RAM: 2GB	
Hard Drive	Hard Drive: 1GB of available space Microsoft .Net 4.5 Framework installed	
USB Port	For onsite support, a working USB port is required (Newer devices may require an adapter) Internet connection for SofTest Download, Registration, Exam Download and Upload	
Screen Resolution	Screen Resolution must be 1024x768 or higher Administrator level account permissions View instructions.	

SofTest-M iPad Requirements

Component	Minimum Recommended Requirements	Notes
Hardware	iPad 2 through 5, iPad Mini, and iPad Pro	
Operating System	iOS 7 through iOS 9.	Only genuine versions of iOS are supported
Hard Drive	500 MB of free space required to commence an exam	
Internet	Internet connection required for SofTest Download, Registration, Exam Download and Upload	
Other	iPad must not be Jailbroken	
Access	In order to take an exam using SofTest-M, your institution must first enable this product and create exams that are compatible with your iPad	

Foundations Curriculum courses – YEAR 1

Surface Pro Requirements:

Surface Pro 1, 2, & 4 (Non-Pro Surface devices are NOT supported)

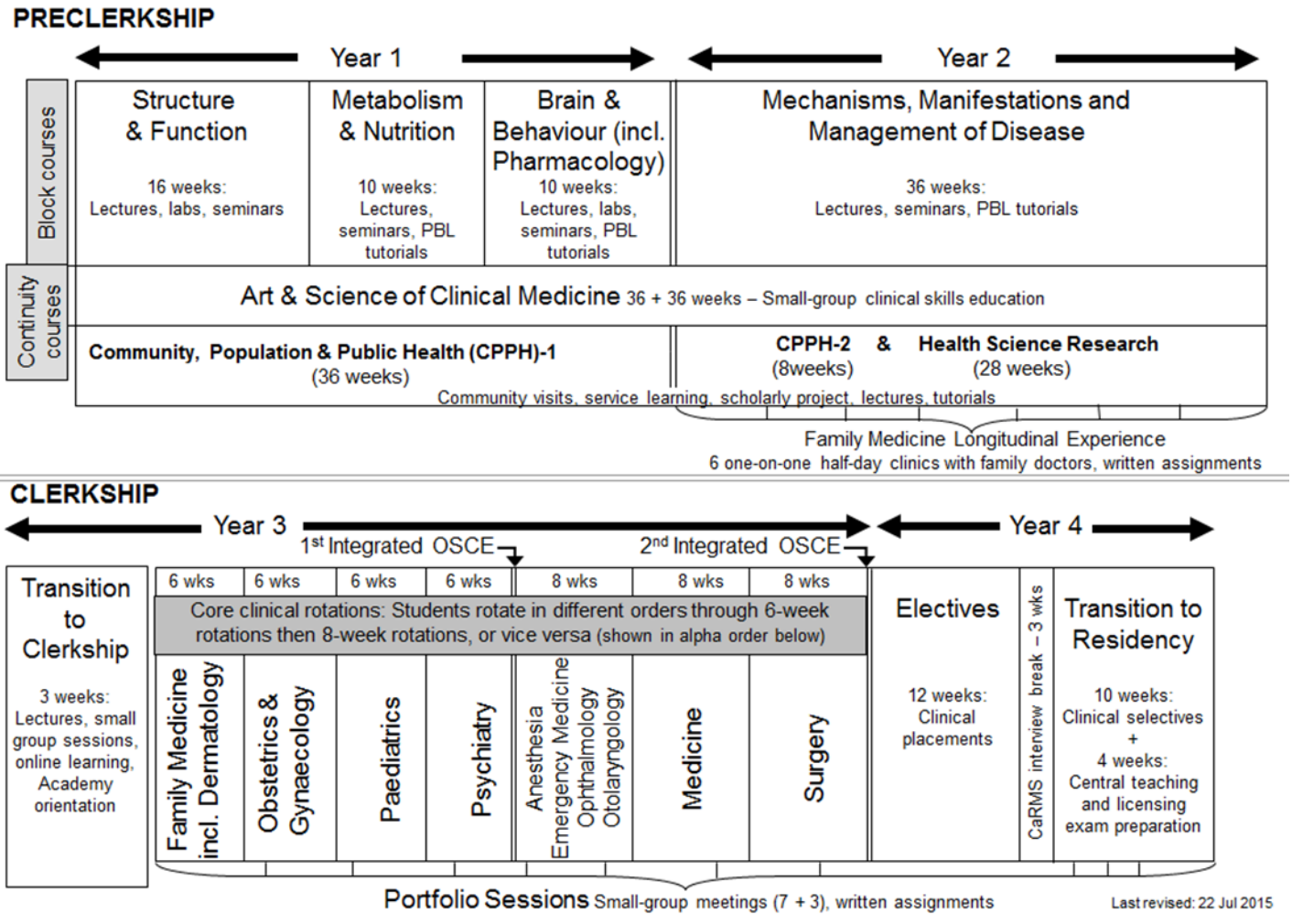
Surface 3 (Pro and Non-Pro devices *ARE* supported)

Component	Recommended	Notes
Keyboard	External Keyboard (USB or Bluetooth) required	Bluetooth keyboards must be paired prior to launching exam
Software	Adobe Reader XI	For exams containing PDF attachments
USB	For onsite support, a working USB port is required	(Newer devices may require an adaptor)
Hard Drive	Hard Drive: 1GB or higher available space	
Internet connection		Internet connection for SofTest Download, Registration, Exam Download and Upload
Screen Resolution	Display Settings must be set to **150%**	
Access	Administrator level account permissions	View instructions.

Curriculum – YEAR 2, 3 & 4

Curriculum overview

Preclerkship is followed by two years of Clerkship. Throughout the curriculum, individual courses are enriched through longitudinal learning about key themes, some of which correspond to specific CanMEDS roles (see MD Program goals and competencies). The overall scheme of the program is diagrammed below, followed by a brief description of the major components. (Note that in the Clerkship, groups of students rotate through the clinical courses in different orders.) Greater detail is provided in the sections that follow this overview.



Each course has one or more course directors, who are responsible for the design and implementation of their course with support from their course committee, administrative staff, and often Academy Medical Education Offices.

Curriculum – YEAR 2, 3 & 4

A number of students (22 in 2015-106) complete a third year clerkship through a different approach and timetable referred to as the Longitudinal Integrated Clerkship (LInC).

Preclerkship overview - YEAR 2

The Preclerkship is comprised of two types of courses:

- **Block courses**, occupy most of the time during each week of the Preclerkship, and include a mixture of lectures, case-based seminars, laboratory sessions, and/or problem-based learning (PBL) tutorials. Students are also introduced in the first term of both first and second year to integrative case-based learning (CBL), medical education research, and reflective practice. The aim of the block courses is to provide a clinically relevant, scientific and humanistic foundations for the theory and practice of medicine, together with a comprehensive introduction to all aspects of clinical medicine.
    - **Mechanisms, Manifestations & Management of Disease** (MMMD, 36 weeks)
- **Continuity courses**, which are each assigned a number of half-day blocks and feature a variety of instructional methods.
    - **The Art and Science of Clinical Medicine (ASCM-2)** is scheduled for one half-day per week, and covers history-taking and physical examination mainly through small group teaching in clinical settings.
    - **Family Medicine Longitudinal Experience (FMLE)** is flexibly scheduled for six half-day clinics during second year, and provides students with a community-based experience with family physicians.
    - **The Health Science Research Course (HSR)** is an introduction to the principles of research, directed at helping students understand and use research to contribute to improving the health of people and populations, including First Nations, Inuit and Metis peoples, in Canada and globally. HSR takes place over twenty-four half days and consists of integrated lectures, tutorials, on line modules, and a practicum, all designed to equip students to be sophisticated consumers and communicators of medical research.

For more details on each Preclerkship course, see course descriptions.

CLERKSHIP OVERVIEW

The beginning of the Clerkship is a three-week Transition to Clerkship course during which students have orientation to the hospital setting in their new role as clinical clerks, further exposure to community health and ethical issues and gender and cultural diversity, instruction in evidence-based medicine, medical imaging and pharmacology review lectures, and teaching on their future role as managers in patient care.

Curriculum – YEAR 2, 3 & 4

The Clerkship consists primarily of a series of core clinical courses in the third year, covering all of the major disciplines of medicine, followed by a fourth year intended to consolidate and deepen students' learning through electives, selectives, and campus-based teaching.

For the third-year core rotations, students are divided into groups and sites, and rotate through each of the courses in different orders. They assume supervised responsibility for patient care, and supplement this learning with didactic experiences at their local sites and through central teaching. Each course maintains a list of required clinical encounters and procedures, and the students must maintain a log on the case logs system demonstrating that they have experienced or performed all of them as part of fulfilling the educational objectives of the course (view the description of Case Logs). In addition, students take part in a Portfolio course for seven sessions of two hours each, during which they have the opportunity to reflect with peers and supervisors (a faculty member and a resident) on their clinical learning in each of the CanMEDS roles (see MD Program goals and competencies).

The fourth-year curriculum consists of thirteen weeks of electives, which can be taken at the University of Toronto or other institutions in Canada or around the world, three weeks off for CaRMS interviews (see The Continuum of Medical Education), and the twelve week Transition to Residency (TTR*)* course. TTR cont of campus-based teaching, including further experiences in community health and review sessions for the Medical Council examination, and three selective periods, at least four weeks which must be spent on a community-based experience. In addition, the final year of the program features a continuation of the Portfolio course from Year 3, with three two-hour sessions taking place during TTR.

For more details on each Clerkship course, see course descriptions.

Themes & competencies

There are several cross-cutting themes and competencies which have representation in many of the courses, during both the Preclerkship and the Clerkship. Teaching is carried out by a variety of teachers from medicine, as well as other health professions and professions outside of health care, via lectures, case-based seminars, and various team-based activities. Themes and competencies are coordinated by designated faculty leads and include:

Curriculum – YEAR 2, 3 & 4

- Ethics and professionalism role
- Collaborator role and interprofessional education
- Manager/Leader role
- Pharmacology
- Health Humanities
- Clinical Skills
- Medical Imaging
- Global Health
- Indigenous Health
- LGBTQ Health Education
- Geriatrics/Care of the Elderly
- Health Advocacy

The Health Humanities initiative informs the existing curriculum and also provides co-curricular opportunities.

The first three competencies ('roles') listed above are directly linked to the same CanMEDS roles that underpin the program competencies. Teaching in these thematic areas is given during both the Preclerkship and Clerkship and serves to provide students with an *integrated* exposure to these very important issues. Each of them has a faculty lead, as indicated below.

Themes & competencies	Faculty Lead	Administrator
Ethics & Professionalism	Dr. Erika Abner erika.abner@utoronto.ca	Joan McKnight joan.mcknight@utoronto.ca 416-946-8719
Manager/Leader	Dr. Isser Dubinsky isser.dubinsky@utoronto.ca.ca	Susan Rice s.rice@utoronto.ca 416.978.2188
Collaborator / Interprofessional Education	Dr. Mark Bonta mark.bonta@uhn.ca	Susan Rice s.rice@utoronto.ca 416.978.2188
Clinical Pharmacology & Therapeutics	Dr. Cindy Woodland (Preclerkship) cindy.woodland@utoronto.ca Dr. Rachel Forman (Clerkship) rachel.forman@utoronto.ca	
Medical Imaging	Dr. Elsie Nguyen elsie.nguyen@uhn.ca	
Global Health	Dr. Rachel Spitzer rspitzer@mtsinai.on.ca	Sue Romulo sue.romulo@utoronto.ca 416-978-1831
Indigenous Health	Dr. Lisa Richardson lisa.richardson@uhn.ca	Dawn Maracle indigenous.medicine@utoronto.ca

	Dr. Jason Pennington jpennington@tsh.to	416-946-0051
Health Humanities	Dr. Allan Peterkin allan.peterkin@utoronto.ca	Joan McKnight joan.mcknight@utoronto.ca 416-946-8719
Clinical Skills	Dr. Katina Tzanetos katina.tzanetos@uhn.ca	
LGBTQ Health Education	Dr. Ed Kucharski ekucharski@sherbourne.on.ca	
Health Advocacy	Dr. Philip Berger philip.berger@utoronto.ca	
Geriatrics/Care of the Elderly	Dr. Thiru Yogaparan tyogaparan@baycrest.org	
Medical Psychiatry	Dr. Sanjeev Sockalingam sanjeev.sockalingam@uhn.ca	

Clinical Skills

Faculty Lead
Katina Tzanetos katina.tzanetos@uhn.ca

The clinical skills theme encompasses a patient-centred approach to medical interviewing and counseling, physical examination and clinical reasoning. As such, this theme includes much of what a physician must master and as students, you will be supported throughout your training to acquire these skills. The curriculum will be developmental, aligned and integrated across years and courses. In year two, teaching will be a focus of Clinical Skills II, and you will have an opportunity to practice further during clinically-based observerships. In third and fourth year, as you immerse yourself in clinical rotations, you will continue to expand your clinical skills within the context of the various medical and surgical subspecialties. Direct observation of your interviewing, physical examination, and counseling by expert faculty will be supplemented by OSCE-style assessments to provide you with corrective feedback.

In order to meet the needs of students who will likely develop their clinical abilities at different rates, students will be able to access additional coaching as necessary. These opportunities will include, but not

be limited to, work with student-run clinical skills interest groups and expert, dedicated volunteer faculty through the Clinical Skills Coaches Program. Students who are identified as needing remedial attention on the basis of their performance within courses, rotations, or on examinations, will be referred to the Clinical SCORE Program for more structured and intensive support.

Ethics & Professionalism

Faculty Lead	Administrator
Dr. Erika Abner erika.abner@utoronto.ca	Joan McKnight joan.mcknight@utoronto.ca /416-946-8719
Mississauga Academy of Medicine (MAM) Faculty Site Coordinator	
Dr. Rob Boyko rboyko@cvh.on.ca	

Teaching in professional ethics in the core curriculum includes a mix of large-group sessions and seminars/workshops. The large-group sessions give students familiarity with the central concepts of medical ethics, professionalism and medical jurisprudence. Some of these sessions are given by single lecturers, others are team-taught, and some involve multidisciplinary panels and patients. Ethics seminars are expert-led and case-based, and sometimes involve the participation of standardized patients.

The Ethics & Professionalism Preclerkship curriculum consists of 52 hours, woven into almost all of the Preclerkship courses. Ethics teaching addresses topics pertaining to the individual doctor-patient encounter (e.g., confidentiality, truth-telling, obstetrical and paediatric ethics, informed consent, euthanasia and assisted suicide, and breaking bad news). There is also teaching on issues such as public and private rights, social justice, and professionalism.

In the Clerkship, there are 18 hours of scheduled sessions for didactic ethics, medical jurisprudence, and professionalism teaching, in addition to the education about ethics and professionalism that arises in the course of students' patient care experience. These sessions include several lectures and seminars in the Transition to Clerkship and Transition to Residency courses, and seminars in the Surgery, and Paediatrics rotations.

In addition, the Clerkship Portfolio course has as a central theme students' professional identity formation. The small-group component of the course encourages students to discuss issues and experiences related

to the development of their professional roles, while the written component promotes reflective practice as a key skill in medical professionalism.

Also see: Professionalism of MD Program students

Leader (formally Manager)

Faculty Lead	Administrator
Dr. Isser Dubinsky isser.dubinksy@utoronto.ca 416-946-0124 (Tuesday and Thursday)	Susan Rice s.rice@utoronto.ca 416.978.2188

The Leader theme curriculum spans the length of the MD Program, and so provides an opportunity for students to learn in progressively greater depth about the various aspects of the role of the physician as a leader in the health care system. The objectives for the Leader role are contained within the overall MD Program competencies and are also referenced in the CanMEDS website.

Leader theme activities are woven into the block courses during the Preclerkship and also play a major role in Transition to Clerkship (TTC) which marks the beginning of the third year, and the Transition to Residency (TTR) course which occurs at the conclusion of fourth year. Assessment involves the completion of required assignments, in-class exercises and also questions on the course examinations.

Year 2:

Students have formal instruction about the physician leader role via several half-day interactive sessions that address the following topics:

- team-building and leadership (CMA)
- managing conflict (CMA)
- health and personal growth
- patient-centred care
- diversity and advocacy

Year 3

Several activities at the beginning of the Clerkship, during TTC course, further develop students' grasp of the Leader role and teamwork, and in particular the phenomenon of change management, via a team-based assignment. Major topics during TTC include learning about quality of care, quality improvement,

patient safety, health care costs, negotiation, transfer of care, getting involved in health care system, physician supply and management of medical error. These topics are convered in both classroom sessions and Institute for Healthcare Improvement (IHI) open school online modules. The Leader role is also the focus of one of the Portfolio course meetings and reflections in year 3.

Year 4 (Transition to Residency (TTR)

In TTR, students participate in a team-based simulation through wich they will learn further about change management, and LEAN methodology.

Collaborator / interprofessional education

Faculty Lead	Administrator
Dr. Mark Bonta mark.bonta@uhn.ca	Susan Rice s.rice@utoronto.ca 416.978.2188

Interdisciplinary collaboration is an integral component of health care and is associated with improved patient outcomes. Analysis of interprofessional collaboration in acute and primary care settings describes a myriad of benefits for both patients and health care professionals. The benefits include: reduced length of stay and costs, enhanced patient satisfaction, treatment compliance and patient-reported health outcomes.

Moreover, members of the health care team report greater job satisfaction and sense of well-being when working in a collaborative fashion. This understanding, coupled with the inherent complexity of health care systems in an era where we must provide care to an aging population of persons with multiple chronic diseases has led to international consensus that models of health professions education must change in order to create a collaborative, practice-ready workforce. Recognizing this, the World Health Organization (WHO) published a framework for action on interprofessional education (IPE) in which it outlined supporting evidence and strategies for implementing IPE into various health care disciplines to achieve this goal. According to the World Health Organization (WHO, 2010), IPE occurs when students pursuing education in two or more professions learn about, from, and with each other to enable effective collaboration and improve health outcomes. Governments and health professions faculties worldwide, including the University of Toronto, have endorsed this move.

In the context of the CanMEDS objectives, the guiding principles of IPE are similar to those defined by the Collaborator competency. The Collaborator objectives, which are found in the overall MD Program

competencies, are fulfilled by the learners through participation in a variety of theme-specific sessions across the curriculum. One of the chief ways in which this educational content is delivered is via the formal IPE curriculum.

Interprofessional Education (IPE)

The IPE curriculum has been developed for students from 11 University of Toronto health professions Departments and Faculties (Dentistry, Medical Radiation Sciences, Nursing, Occupational Therapy, Pharmacy, Physical Education & Health, Physical Therapy, Physician Assistant, Social Work, and Speech-Language Pathology, as well as the MD Program), and is delivered under the auspices of the Centre for IPE. To complete the IPE curriculum, students take part in both core and elective learning activities throughout the program.

The core activities over the four years of the MD program can include:

- a large-group session with all new health professionals that introduces the concept of collaborative practice;
- a week-long session on the multidisciplinary approach to the management of pain ;
- a Conflict in Interprofessional Life workshop; and
- Palliative Care Session

Students should reference the UT Interprofessional Education (IPE) Program/Curriculum on the portal for specific program-year requirements.

In addition to these 4 core sessions, the students complete a half-day experience during TTC whereby they shadow a member of the IP team in a hospital setting and have devoted time during their Portfolio sessions in Clerkship to reflect on their experience as collaborators.

Lastly, students are required to complete a variety of IPE elective learning activities during their four years of training that expose them to different aspects of their role as collaborators. The students select experiences from a catalogue of various learning activities that range in topic, depth of immersion and specific IP competency addressed. Examples of IPE electives include an afternoon workshop on medication safety, various lectures from non-physicians and patients, panel presentations, and immersive clinical experiences with learners from other health care faculties. The formal IPE elective experiences are complemented by their interactions with other health professionals during clinical training in Clerkship, during teamwork sessions, and educational sessions delivered by educators from other health professions during their clinical rotations.

Curriculum – YEAR 2, 3 & 4

See overview of Interprofessional Education (IPE) curriculum and requirements.

Clinical Pharmacology & Therapeutics

Theme Coordinators
Dr. Cindy Woodland (Preclerkship) cindy.woodland@utoronto.ca Dr. Rachel Forman (Clerkship) rachel.forman@utoronto.ca

Instruction in clinical pharmacology and therapeutics is distributed throughout the MD Program. Formal teaching in pharmacology primarily occurs during the years of Preclerkship and in TTC. Students are first introducted to the principles of pharmacology in lectures, seminars, case-based learning and online learning. Therapeutic drug classes are introduced with the appropriate systems, with an emphasis on their mechanisms of action. Appropriate drug therapies (often involving a combination of drug classes) are taught in an integrated fashion with the diseases of interest. Some specific drugs and dosages are discussed during the Clerkship.

- **Mechanisms, Manifestations, & Management of Disease**
    - Learning about the appropriate use of medications in the treatment of disease is a principal goal of the MMMD course. Medications are addressed in virtually every week of the course. In addition, there is specific lecture-based teaching of several key pharmacological topics such as teratogens, drug use in pregnancy, adverse reactions, and drug interactions.

- **Transition to Clerkship**
    - There are nine hours of pharmacology teaching designed to prepare students for entry into the Clerkship. This teaching consists of small-group sessions to provide a practical approach to therapeutics. Teaching centres around decision-making in prescribing medications and helps students become familiar with the medications they will be most likely to prescribe for common disease processes while in the Clerkship. Small-group sessions allow students to work through cases specifically designed to cover the practical management of common medical problems encountered in Clerkship, including choice of medication, dose and frequency, side effects, and monitoring.

- **Clinical Clerkships**
  - Students are provided with informal teaching about therapeutics during the clerkship from staff preceptors and residents. Clerkship students are provided with a 'Drugs on the Go' pharmacology text that addresses the key properties of commonly used drugs in table format.
  - Clinical pharmacology topics appear in the Case Log requirements for various rotations.
  - Clinical pharmacology is also tested in the Integrated OSCES (iOSCES) at the midway point and end of year 3.

- **Transition to Residency**
  - There is a review session on important aspects of clinical pharmacology to help prepare students for both the Medical Council exam and their training in residency.

Medical Imaging / Diagnostic Radiology

Theme Coordinator
Dr. Elsie Nguyen elsie.nguyen@uhn.ca

Medical imaging instruction occurs in a number of courses in the Preclerkship and Clerkship:

Year 2:

- **Mechanisms, Manifestations, & Management of Disease**:
  - Teaching in medical imaging is delivered through dedicated sessions that address chest X-ray interpretation, imaging in the context of trauma, and obstetrical ultrasound, and is also integrated into the discussion of many of the clinical problems presented in the course. Small-group teaching is provided during Respirology Week on chest X-ray interpretation and during Trauma Week on interpretation of imaging in the setting of trauma.
- **Community, Population, and Public Health**
  - Radiologists participate in research projects with a small number of year 2 students in fulfillment of the CPPH research requirement.

Year 3

- **Transition to Clerkship**
  - There is a total of three hours, including an introductory lecture on medical imaging, "Approach to effective utilization of the Medical Imaging Department," resources such as PACS and ordering imaging studies, a review of the American College of Radiology Guidelines for

appropriate use of medical imaging, an algorithmic approach to the utility of medical imaging studies, using a clinical case-based interactive session.

- **Medicine**
  - There are three one-hour case-based, interactive seminars conducted during the Clerkship Introductory Seminars during the Medicine rotation. The sessions address chest imaging, abdominal imaging, and neuroimaging.
- **Surgery**
  - A two-hour interactive, case-based seminar is conducted during each rotation on the subject of surgical issues and the role of medical imaging in addressing them.

Year 4:

- **Electives**
  - Electives in medical imaging are offered at all of the fully affiliated academic health science centres and some of the community hospitals (including Trillium Health Partners and North York General Hospital).
- **Transition to Residency**
  - TTR selectives include a variety of opportunities in medical imaging geared to participating students' specific residency programs.
  - Small-group interactive seminars on 'Utilizing Imaging Department Resources Effectively' and interactive sessions on 'Interpreting CXR' and 'Interpreting Brain CT' are conducted at certain TTR selective sites.
  - New in 2015, a hands-on ultrasound session for three hours was added where students learn about FAST scan used in emergency departments. An introductory lecture in cardiac echocardiogram was introduced with demonstrations on student volunteers. The session is conducted by Dr. Nguyen and Dr. Roy Yank (PGY3 radiology resident).
  - During the Fusion Weeks, an interactive seminar using an audience response system is provided in preparation for the MCCQE Part I examination.

Extra-curricular research

- Comprehensive Research Experience for Medical Students (CREMS)
  - Opportunities are available for Preclerkship students to participate in jointly-funded summer research programs with faculty from the Department of Medical Imaging. (See the description of CREMS)

Global Health

Theme Lead	Administrator

Dr. Rachel Spitzer rspitzer@mtsinai.on.ca	Sue Romulo sue.romulo@utoronto.ca 416-978-1831

Global health is a major focus of the Faculty of Medicine's 2011-2016 strategic plan, and an important facet of social responsibility, another major University theme and has a key place in the curriculum. Global health has been defined as "the area of study, research and practice that places a priority on improving health and achieving equity in health for all people worldwide" (Koplan JP, et al; Lancet. 2009; 373:1993-1995). According to the WHO, it is the health of populations in a global context and transcends the perspectives and concerns of individual nations. Thus, global health practice and endeavours can very much take place within our own city and scope of practice or can be located in clinical practice, research, or public health endeavours taking place very far from home.

The Global Health theme focuses on integration and coordination of existing teaching in this subject area and on expanding it across the entire program. This will involve elements including identification of global health components in existing courses (such as MMMD), faculty development to enhance global health education opportunities, faculty input into the existing global health EEE course and input into the ongoing process of extensive curricular development and redevelopment. Further, it is the aim of this theme to support the initiatives of the student global health representatives to respond to student needs in regard to global health education. Finally, this theme will also include enhanced oversight of out-of-country opportunities, electives, and selectives for medical students. Pre-departure training and post-return briefing opportunities for students participating in educational experiences outside of Canada have been implemented under the Global Health. The theme lead works closely with the postgraduate global health lead to create coordination and consistency in the overall medical program.

Indigenous Health

Faculty Co-Leads	Administrator
Dr. Lisa Richardson lisa.richardson@uhn.ca Dr. Jason Pennington jpennington@tsh.to	Dawn Maracle indigenous.medicine@utoronto.ca 416-946-0051

Curriculum – YEAR 2, 3 & 4

The Indigenous peoples of Canada (First Nations, Metis, and Inuit) face health inequities when compared to the general population. The Faculty of Medicine is committed to addressing this issue. Training physicians with the appropriate knowledge and skills to better serve the Indigenous population is a cornerstone to success. Furthermore, it is part of recommendation #24 of the Truth & Reconciliation Commission.

Aboriginal Health issues and concepts are being integrated throughout the curriculum. The first formal introduction will occur in Community Health Week of Foundations where topics include*: Traditional Indigenous Concepts of Health (The Medicine Wheel), Health Status, Historical and Political Influences on Health and Health Care Delivery* and *The Social Determinants of Aboriginal Health*. Progressing through the curriculum, these subjects will be reinforced and expanded upon in PBL cases and in several Clerkship rotations. Because these teachings can play an integral role in ones development as a clinician and a health care professional, they will also be revisited and adapted to the learners evolving roles as clinical clerk and resident in the TTC and TTR courses.

Incorporating the concept of Cultural Safety into the curriculum is a key step to nurture appropriate clinical skills. Developed by Maori health care practitioners who noted that cultural factors play a role in health disparities*,* Cultural Safety uses self-reflection as a tool to advance therapeutic encounters. Although it was created for care models in Indigenous communities, Cultural Safety can be applied to all therapeutic encounters; it is especially beneficial as a concept to guide students' interactions with marginalized patients or in difficult clinical scenarios. While it is introduced in ICE: Clinical Skills and Foundations, Cultural Safety and anti-oppression must be fostered throughout medical training and maintained as a practicing physician. A self-reflective approach is the hallmark of our innovative selective in Urban Indigenous Health.

There are many other exciting ways in which students are able to become involved in Indigenous Health*.* The student-run Aboriginal Health Elective has been a great success. There are also opportunities for Indigenous community basedCBS placements and summer research projects. Electives and selectives in a variety of Aboriginal populations (reserve, rural and urban) are possible thanks to partnerships with NOSM and numerous Aboriginal organizations and communities.

We understand that these are new concepts to the MD Program curriculum. We have developed some introductory materials and webinars available on-line. Please feel free to contact us or the office if you have any questions. The office of the Indigenous Health Program is located in MSB, Room 2354.

Curriculum – YEAR 2, 3 & 4

Health Humanities

Faculty Lead	Administrator
Dr. Allan Peterkin allan.peterkin@utoronto.ca	Joan McKnight joan.mcknight@utoronto.ca /416-946-8719

Health Humanities can be defined as a sustained interdisciplinary and interprofessional inquiry into aspects of medical practice, education, and research, expressly concerned with the humanistic side of medicine.

The Health, Arts, and Humanities Program advances a deeper understanding of health, illness, suffering, disability, human dignity, and the provision of care by creating a community of scholars in the arts, humanities, and clinical and social sciences. Our Program encourages the development of skills and attitudes essential to providing person-centred care.

1. Narrative Competence: the capacity to appreciate, interpret, and work empathically with the stories of others.
2. Reflective Capacity: the ability to step back to interpret both subjective and objective experiences as a part of learning and to foster professional wellbeing.
3. Critical Thinking: the ability to solve problems creatively and to analyze and critique knowledge using the multiple lenses provided by the arts and health humanities.
4. Visual Literacy-the ability to work with non-verbal cues, images and visual narratives.

Core content

The Health Humanities program helps to shape content and learning approaches within the obligatory Portfolio course. The Companion Curriculum provides literary and visual arts content to match every learning block and CBL in all four years of undergraduate medical education. This content can be found on the humanities blog ARTBEAT (www.utmedhumanities.wordpress.com). Core lectures on narrative medicine, the humanities and arts-based learning are scheduled in each year.

Electives

A longitudinal health humanities elective allows students to accrue points and IPE learning credits over all four years of education. This can lead to a Certificate of Distinction in Inter-Professional Health Humanities. For more information on the Certificate, please contact: rebecca.singer@uhn.ca.

Offerings include:

- Two Artists in Residence Programs (the
- Theater-based seminars

Illustrator in Residence Program and the Massey College Barbara Moon Editorial Program) both offering seminars during the academic year
- Monthly Lunch and Learn sessions on arts and humanities topics
- Cinema Medica offering monthly discussion around films dealing with health-related themes
- A Medical History interest group
- An English- Medicine book club
- The Art Gallery of Ontario Art Appreciation elective
- Monthly mindfulness sessions
- The Program publishes a highly acclaimed literary journal called Ars Medica, A Journal of Medicine, the Arts and Humanities. Students have the option to submit to the journal and to obtain editorial experience in producing a literary journal. (www.ars-medica.ca)
- Students curate the annual art show called Synethesia
- Students also have the option to create individualized learning experiences through the summer CREMS research program or through liaison with humanities/clinical educators

For more information and updates on new humanities elective and interest group offerings, please visit the program website: www.health-humanities.com. Instructions for joining the humanities list-serv can also be found there.

LGBTQ Health Education

Theme Lead
Dr. Ed Kucharksi ekucharski@sherbourne.on.ca

The health disparities and unique health needs of the LGBTQ (lesbian, gay, bisexual, transgender, and queer) population are becoming increasingly recognised by public health researchers and the medical community. Insufficient numbers of physicians competent in dealing with LGBTQ health issues have been identified as a substantial barrier to accessing care for these patients. In line with a commitment to the values of equality and social justice, the Faculty of Medicine is dedicated to addressing this issue.

The LGBTQ Health theme aims to equip students with the knowledge, skills, and attitudes necessary to provide clinically and culturally competent care to patients who are LGBTQ-identified. Within *ASCM*, students will learn how to perform a culturally appropriate sexual history and physical examination, including the use of language that is affirming to those belonging to minorities of sexual orientation and gender identity. Clinical knowledge will be integrated within relevant block course lectures, CBL cases, and

other tutorials on the determinants of health as they relate to the LGBTQ population. Students will gain an appreciation of the impact of stereotypes, assumptions, and physician attitudes on health outcomes of LGBTQ patients, and will be encouraged in turn to examine and explore their own perspectives and possible biases.

The LGBTQ Health theme aims to incorporate innovative strategies to deliver relevant curriculum content in an interactive, dynamic and meaningful way. LGBTQ community members will be involved in many aspects of curricular development, delivery, and evaluation. Opportunities for interprofessional education will prepare students to care for members of marginalized populations as part of an interdisciplinary team.

Other ways that students may wish to supplement their competency in this domain include participation in electives and selectives in LGBTQ Health in various health care environments ranging from primary to quaternary. Additionally, opportunities will exist for students to complete LGBTQ-focused research projects.

We invite all students and faculty, LGBTQ and allies alike, to become involved in the ongoing development of LGBTQ-related curriculum through participation in the LGBTQ MD Program Advisory Committee and Community Liaison. Through fostering attitudes of appreciation for diversity and respect for difference, the Faculty of Medicine aims to create a climate in which all LGBTQ-identified faculty, students, and patients feel supported, included, and safe. Interested individuals should contact Dr. Kucharski directly (ekucharski@sherbourne.on.ca).

Health Advocacy

Theme Lead
Dr. Philip Berger philip.berger@utoronto.ca

Health Advocacy is a newly developing curriculum initiative for the Faculty of Medicine that was formally launched on January 1, 2014 with the appointment of an Advocacy Lead and the establishment of an Advocacy Advisory Reference Group which includes student representatives. The Faculty is seeking to fully integrate the teaching of advocacy into the undergraduate curriculum in a manner consistent with the 2015 revised CanMEDS role for advocacy which states that advocacy requires action, and physicians contribute their knowledge of the determinants of health to positively influence the health of the patients, communities, or populations they serve and that physicians support patients, communities, or populations to call for change, and they speak on behalf of others when needed.

Beyond the traditional annual lecture on advocacy delivered to first year students and popular workshops on poverty and advocacy skills which have been available for several years, an accredited CPPH Community Based Service advocacy project was implemented in February 2015. The project called AMI (Advocacy Mentorship Initiative) pairs students as mentors with clients of Big Brothers/Sisters Toronto. The 2014 inaugural Longitudinal Integrated Curriculum (LInC) for clerks held at the FitzGerald Academy constituted a formal advocacy project as part of the curriculum and was extended to the other academies in 2015. All first year students are provided the opportunity to spend a half day at a homeless shelter under the supervision of a physician from the Inner City Health Associates.

The Advocacy Lead is available as an advisor to any student who is pursuing an advocacy activity such as the nearly 40 students who organized the 2015 fourth National Day of Action opposing cuts to refugee health care.

The intent of these activities in the advocacy portfolio is to spread the teaching of advocacy into all aspects of undergraduate education from the seminar rooms to the hospital wards.

Geriatrics / Care of the Elderly

Theme Lead
Dr. Thiru Yogaparan tyogaparan@baycrest.org

The proportion of the population that is elderly continues to grow. People 65 years and older represent 16 per cent of the Canada's Population. Older adults 65 and over will double in numbers over the next 20 years and those over 85 will quadruple. At present older adults represent 40 per cent of hospitalizations and 60 per cent of hospital days in Canada. The elderly have unique health care needs and future physicians must be prepared to provide optimal care to them. Accordingly, a Care of the Elderly/Geriatrics theme has been established and a theme lead appointed during the 2014-15 academic year.

The Geriatrics theme lead is responsible for the design, development, implementation, and evaluation of composite curricular elements in the MD Program to develop competencies in care of older patients. The purpose of this theme is to develop appropriate learning objectives that support the learning of core competencies related to geriatrics in light of the national geriatrics curriculum throughout the program. The geriatric theme lead works in collaboration with course directors and other theme leads to design

appropriate learning activities that permit students to achieve these competencies. Assessment activities are also jointly designed to ensure students have, in fact, reached the required milestones. This theme will also develop a geriatrics hub.

Medical Psychiatry

Theme Lead
Dr. Sanjeev Sockalingam sanjeev.sockalingam@uhn.ca

Our health system often divides mental health from physical health into distinct silos of care and treatment, yet no such mind-body duality exists in actual patients. Many individuals with chronic health conditions simultaneously experience mental health issues - and the reverse - and as such "concurrent" health challenges are far from uncommon.

Therefore, integrated approaches to healthcare are needed to respond to these growing healthcare needs. The theme of Medical Psychiatry (physical and mental healthcare) was developed in response to the growing healthcare needs and challenges in caring for patients with both physical and mental health conditions. It will teach students how to understand and engage patients using a patient-centered approach in a variety of settings. The content will build on Clinical Skills teaching and provide opportunities to practice therapeutic communications and to understand experiences of patients who are living with complex medical, physical and social issues. The Medical Psychiatry theme will extend from case-based learning activities, core lectures, and simulation experiences across the program. It will also be integrated into clerkship experiences including through longitudinal integrated clerkships, where students will receive training in psychiatry, internal medicine, pediatrics and family medicine in an integrated, longitudinal rotation rather than sequential rotations. Clinical experiences related to this theme will focus on improving therapeutic communications, navigation of patient care, advocacy and exposure to integrated care models.

In parallel, University of Toronto faculty members will be trained at partner hospitals through Medical Psychiatry continuing professional development programs to support students' development of knowledge, skills and attitudes in this area.

This theme is part of a larger healthcare system and education initiative called the Medical Psychiatry Alliance (MPA). For more information about MPA click this link: http://www.medpsychalliance.ca/Pages/default.aspx

Learning Modalities

The following descriptions capture the major types of learning modalities employed in the MD Program curriculum. They are presented in roughly chronological order as they are employed over the course of the program.

Lectures

Lectures delivered to the entire class are a core activity in the Preclerkship curriculum. There are generally between ten and twelve hours of lectures per week. Each lecture is scheduled for 50 minutes, beginning at ten minutes after the hour and concluding on the hour.

Outside of the Preclerkship, lectures are also included in some clinical clerkship rotations. In this case, the lecture is given multiple times throughout the year to each group of students on a given rotation.

Typically, the individual responsible for delivering a lecture is also responsible for preparing the lecture materials. The course director or other faculty leader in the course should provide direction to the lecturer on the general content and expectations of the session.

Most lecturers use PowerPoint to present their lecture materials. In the Preclerkship lecture theatres, a digital 'document camera' is also available, and can be used in the same way as an overhead projector. Lecture materials are submitted to the course director or administrator at least ten business days beforehand to allow time for technical testing, online posting and printing (if applicable).

Every lecturer must include a declaration of potential conflicts of interest due to commercial or professional interests. Declarations of no conflict should also be made. The MD Program requires that these declarations be included as the second slide in any PowerPoint presentation, using a template supplied by the program.

All lectures are digitally recorded using video-capture and are posted online on the secure portal for later review by students, provided permission is granted by the lecturer. The slides used during each lecture are included in the posted materials.

Videoconferencing is used throughout the curriculum. Students at both the St. George (Toronto) and UTM (Mississauga) campuses view and participate interactively in lectures. Approximately 20 per cent of Preclerkship lectures feature a live lecturer in Mississauga, linked by video to the Medical Sciences Building (MSB) on the St. George campus, while in the remainder of lectures, the lecturer is located at the MSB.

Seminars (Preclerkship & Clerkship)

These are case-based sessions delivered by content experts to groups varying in size from ten to thirty students in the Preclerkship, or as low as two or three students in the Clerkship. Seminars are characterized by a significant emphasis on the approach to clinical problems, often based on a clinical case. During seminars, students are encouraged to answer questions about the problems. They are also given the opportunity to ask questions about material covered in other parts of the specific course. Seminar materials for the students and additional information in the form of a confidential tutor guide are typically prepared by the course committee or an appropriate teacher, and provided to all seminar leaders to ensure a consistent student experience.

Problem-based learning (PBL)

PBL tutorials are a significant part Mechanisms, Manifestations and Management of Disease (MMMD) course in year 2. PBL tutorials are delivered in groups of six to nine students, and are facilitated by a faculty tutor. Each PBL tutorial centres around a fictional clinical case designed to stimulate student learning on the topic of the week in the course.

Groups meet twice for each case. The purpose of the first session is to introduce the case and define the learning issues. At this first tutorial, the case is distributed to the students 'one page at a time' in order to simulate the process of real-life data-gathering. As each page is distributed, the students define what they understand about the case, their hypotheses about diagnosis and management, and their learning requirements to better understand the case. In so doing, they generate a set of learning objectives in the form of questions. The 'homework' after the first session is then to research these questions on their own (or in groups). At the second tutorial, the students share with their peers and their tutor what they have learned since the first session, and in particular how they went about trying to answer the questions: what sources they used, how they found them, and the strengths and drawbacks of each.

Throughout the PBL tutorial process, emphasis is placed on both the 'Medical Expert' and also other categories of objectives, in order to encourage students to appreciate the variety of roles physicians need

to play and the range of psychosocial contributors to illness. They also consider ethical and organizational aspects of clinical practice.

PBL cases are developed and refined centrally, and all tutors are provided with both the learning materials to be given to the students and a confidential set of tutor materials that are used to prompt discussion and ensure that there is general uniformity among the groups with regard to the learning objectives that are attained by the end of the second tutorial. Where possible, PBL tutors are assigned to cases whose content is relatively close to their clinical domain of interest.

Clinical skills instruction in the Preclerkship (ASCM-2)

For one half-day per week throughout the second year of the program, ASCM -2 courses, students learn the clinical skills of interviewing, history-taking, and physical examination, as well as how to interpret the data in a diagnostic formulation, and then document and present it. Instruction takes place in groups of five to six students, with one tutor (or occasionally two tutors) per group. The tutors are responsible for teaching the basic clinical skills to the students, who often initially practice the skills on each other or sometimes on 'standardized patients.' Students are assigned particular tasks in each tutorial, and the tutors are responsible for observing the students' performance and correcting any deficits. The key learning activity of each tutorial involves students interviewing and examining patients. They receive feedback from their tutors throughout the courses, based on both direct observation and submitted written work. For more details, please see the course description.

Family medicine clinical experiences in FMLE

In year 2 Family Medicine Longitudinal Experience (FMLE) course, students attend six half-day family medicine clinics in the community, observe the family doctor, and practice the history-taking and physical examination skills that they have acquired in ASCM. Placements are one-on-one, which enables students to spend time with their preceptor's patients longitudinally during clinic and to receive focused feedback. For details, please see the course description.

Clinical supervision in Clerkship

Students in years 3 and 4 spend the majority of their time in clinical settings, under the supervision of experienced physicians from a variety of disciplines. Supervision of clerks entails a number of activities, including observing their interactions with patients, demonstrating new skills to them, discussing all issues related to patient care, hearing reports from the student, appraising his/her level of knowledge and clinical abilities, and serving as an example and mentor in the provision of care. Individual rotations will naturally

focus on teaching skills that are particularly relevant to their specific domain. Constant formative feedback to the student is paramount at this stage of their training, to ensure that they progress as expected.

All seven CanMEDS roles take on new meaning for the student who is assuming clinical responsibilities for the first time, and supervisors should ensure that they are familiar with the expectations in this framework for the program as a whole and for the specific course in which they are teaching.

In cases where residents, allied health professionals, or others are also involved in clinical clerk supervision, the primary faculty supervisor holds overall responsibility for the education and well-being of the student, and should ensure that the other team members understand all expectations related to the student.

Portfolio tutorials

These take place on six occasions during the first year of the Foundations Curriculum, on seven occasions during the third year of Clerkship and three times in fourth year. They are led by a faculty member (Academy Scholar) and a senior resident (Junior Academy Scholar) and involve students in groups of approximately six to eight. In first year, students will have the opportunity to reflect on their experiences as doctors-in-training, and to receive feedback from their peers. The goal of these sessions is to nurture a safe space where students can learn to reflect on the non-medical expert CanMEDS roles and thus develop their identity as a doctor and shape the way that they want to practice medicine. In the third and fourth years, students will share accounts of their experiences during their Clerkship in relation to the 'intrinsic' (i.e. non-Medical Expert) CanMEDS roles. They will discuss and reflect on these experiences and provide feedback to each other, guided by the Academy Scholars. For details, please see the Portfolio course description. Portfolio tutorials also take place in year 2 as part of ASCM-2. See course description.

Simulation and web-based learning

Simulation is employed in several settings during the MD Program, and includes a variety of technologies including computer models, mannequins, online cases, standardized patients, etc. Simulation allows students to learn a variety of skills effectively and receive structured feedback prior to patient contact. Simulation also provides opportunities for students to tackle clinical tasks they would not otherwise see.

Web-based learning in the program includes the 'virtual microscope laboratories' in Structure & Function (http://histology.med.utoronto.ca – username and password are provided to students). Other examples include CLIPP cases in Paediatrics and IHI modules in Transition to Clerkship. Web-based exercises are generally completed independently, although class time may be set aside for students to work on the exercises and/or seek assistance with them.

Independent learning

An essential category of educational modalities is independent learning or self-study. Time is reserved for this each week during the Preclerkship. Students often use these timeslots to arrange 'shadowing' opportunities (see Enriching Educational Experiences), participate in service learning, or pursue other interests. Otherwise, this time can be used to study their course material, complete written assignments, and prepare for upcoming sessions. A variety of resources in print and online are provided to students for study, including recorded lectures, and they receive instruction in the use of these resources during each of the first three years of the program.

During Clerkship, the amount of independent learning time varies from rotation to rotation. MD Program policy places restrictions on the number of hours students can be assigned to clinical and didactic activities, in order to ensure that they have adequate time for study and personal matters.

Grading System & Assessment of Students

Many teachers have assessment responsibilities, and it is important to understand both the purpose of the assessment and the expectations for student competence. If you are assigned to assess one or more students and have any questions about the requirements, please contact the course director.

Transcripting practice

All courses in all four years of the MD Program at the University of Toronto are transcripted Credit/No Credit (CR/NC), which is commonly referred to as 'Pass/Fail' at other institutions. This policy was introduced beginning with the 2009-2010 academic year. Up to 2008-2009, all courses with the exception of the first-year clinical skills course, ASCM-1, had been transcripted as Honours/Pass/Fail (H/P/F).

This change is congruent with our competency-based curriculum and approaches to student assessment. It is also in line with the trend in grading policy across Canada.

A note about numerical results: individual assessment components (e.g. exams) may be given a numerical mark, which is shared with the student. As component marks, these results will never appear on transcripts or other documentation provided by the MD Program to external individuals or organizations.

Furthermore, the MD Program will calculate numerical grades for each course for the purpose of determining the recipients of academic awards and identifying students whose performance is below

expected standards and who may therefore require either extra work, remediation, or repetition of a course or year. These confidential numerical final grades will never appear on transcripts or other documentation, but will be reserved exclusively for internal use.

According to MD Program's *Principles governing the use of personal information in Undergraduate Medical Education,* individual teachers are also prohibited from disclosing students' numerical marks or evaluation results in reference letters or other documentation.

What information about student grades is sent to CaRMS when students apply for postgraduate training programs?

The MD Program sends three types of information:

1. The transcript of course grades, indicating whether the student received 'Credit' or 'No credit' for each course in the first three years of the MD Program. Individual components are not listed.
2. The Medical Student Performance Record (MSPR, also known as the 'Dean's Letter'), which provides a summary of the student's ratings in each of the competencies for each of the clerkship rotations of two weeks' length or greater, based on their final clinical evaluation form. (See Clinical Performance Evaluations below)
3. A statement that the student has met the medical school's expectations regarding professional behaviour.

Grading regulations

Each course assesses students on at least two occasions, as required by University policy. The methods of assessment used in the various courses are described below under *Assessment modalities*. Course directors are responsible for selecting both appropriate assessment modalities to best measure how students perform in relation to the program and course objectives, and appropriate criteria for students at this level of training.

As described in the Transcripting section above, many assessments receive a numerical mark while others are simply denoted 'Credit' or 'Non-Credit'. For numerical assessments, 60% is generally a passing grade. In most courses, all assessments must be passed in order to receive credit in the course. Details and exceptions are provided in the official course descriptions.

Furthermore, students must demonstrate satisfactory professional behaviours, as described in the Professionalism section. In the clinical clerkships, they must also achieve satisfactory results on each competency on the clinical evaluation and complete all required encounters and procedures.

Outcomes of Course Assessments: The Standards for Grading and Promotion of Undergraduate Medical Students (pre-2016-17 admission) (PDF), the *Standards for the Requirement of Extra Work in the Preclerkship (PDF),* and a summary of the *Guidelines for the Assessment of Undergraduate Medical Trainees in Academic Difficulty* are available on the MD Program website (www.md.utoronto.ca/policies).

Briefly, there are three possible outcomes in relation to a student's status at the conclusion of a course:

- A 'clear pass': the student demonstrates satisfactory performance on every assessment, and scores at a satisfactory level in the course as a whole (generally 60% overall, calculated based on the numeric assessments), and meets all other specific requirements of the course.
    - Credit is obtained in the course.
- 'Borderline' performance: the student demonstrates performance on one or more components that does not meet the standards of the course, and/or is generally weak (typically 60-70% overall)
    - Credit is temporarily withheld.
    - Course director assigns the student extra work (additional study and a written assignment or new exam) in the area(s) of weakness.
    - If the extra work is completed satisfactorily, the original marks are permitted to stand and credit is obtained in the course.
- A 'clear failure': the student's performance on one or more assessments is sufficiently low that the student's calculated grade in the course is below 60% and/or other specific requirements of the course are not met.
    - Credit is temporarily withheld.
    - Student is brought forward to the Board of Examiners, who will typically require the student to complete formal remediation.
    - If the remediation is completed satisfactorily, the course mark is raised to 60% and credit is obtained in the course.

Board of Examiners: All academic programs in the Faculty of Medicine have a Board of Examiners, a standing committee of Faculty Council. The MD Program Board of Examiners consists of 13 members, including two students. The Board of Examiners is responsible for approving all course grades, and makes the ultimate decisions about student promotion, requirements to do remedial work, and dismissal from

the program, e.g. for repeated failures of an entire year or egregious lapses in professionalism. Students have the right to appeal decisions made against them by the Board of Examiners.

Criteria for graduation: In order to graduate from the program, students must achieve a standing of 'Credit' in every course, based on the requirements of each course. They must also have satisfactory professionalism evaluations.

Assessment modalities

The following descriptions capture the major types of assessment employed in the MD Program curriculum:

- **Multiple-choice examinations**
  Examinations featuring multiple-choice questions are used extensively throughout the program, most prominently in the Preclerkship block courses to verify students' knowledge of the course content, but also in the Clerkship and other Preclerkship courses. These questions are typically written by a group of teachers with content expertise, and marked by computer.

- **Short-answer questions**
  These are generally used in combination with multiple-choice questions on written examinations. They require the student to demonstrate a thorough understanding of the topic at hand and an ability to reason through a problem. These questions are used in many Preclerkship and Clerkship courses; they are usually composed and marked by teachers with specific content expertise.

- **Written assignments**
  Written assignments range in scope and purpose across the program, from case reports (ASCM-1 and ASCM-2), a team-based problem-solving assignment (Manager theme), a continuous patient profile (Psychiatry rotation), reflections on the student's personal experiences in clinical settings (Portfolio), and a number of others. While the specific objectives of these assignments vary, they generally do involve an assessment of the student's ability to communicate effectively in writing, including presenting their findings or argument in a logical, well-organized manner. Creation of the assignments usually rests with the course committees.

- **Oral presentations**
  These are a key component of small-group learning in the Preclerkship, in particular in the ASCM courses (as case reports), in the CPPH courses, in which they relate to the students' experiences in community field visits, or their research-related assignments in the Health Science Research course.

Students also make presentations to their teachers and classmates in other settings such as Portfolio sessions and PBL (problem-based learning) tutorials in the Preclerkship block courses, although these activities are not always graded. Oral presentations are generally marked by the student's tutor, using criteria established by the course committee.

- **Clinical oral examinations**
  Oral exams are a component of many clinical clerkships rotations. Generally, the student will interact with a selected patient (or 'Standardized Patient,' i.e. an actor) for a period of time, obtaining the history and physical examination, and present this to the examiner(s). The student is then asked questions about the case and other pertinent details, based on the course or assessment objectives. Clinical oral examinations are designed as a summative assessment of a student's acquisition of the required skills of the rotation. The specific expectations are set by the course committees, and marking is conducted by the student's tutor or supervising faculty member (but not by residents).

- **OSCEs (Objective Structured Clinical Examinations)**
  OSCEs are station-based clinical skills examinations in which students rotate through a series of rooms, and in each one are required to simulate a real clinical encounter with a Standardized Patient (an actor playing a patient) who is assigned a particular case, while being observed by a faculty examiner. The student is expected to complete specific tasks and, towards the end of each station, may be asked a small number of questions by the examiner. Students are given a global rating on each OSCE station, and examiners may also be asked to complete a checklist documenting the student's performance on all aspects of the station (for instance, their skills on certain manoeuvres, their communication with the patient, etc.). OSCEs are considered to be more reliable than simple clinical oral examinations because they present each student with identical cases, and because the number of stations translates into assessment of a broader array of tasks and scenarios.

  NB: OSCEs are conducted in the ASCM courses in the Preclerkship. In the Clerkship, an Integrated OSCE is conducted for all clinical rotations at the midpoint and end of Year 3 (See Integrated OSCE). The Psychiatry rotation also runs a separate OSCE, and the Medicine and Surgery rotations conduct a 'Structured Clinical Examination,' which is a similar assessment exercise. In all cases, stations are carefully developed by committee. Examiners may be recruited from the existing teaching pool in a course and/or at the Departmental level, and are given orientation prior to each exam.

- **Professionalism evaluations**
  Student professionalism is assessed in all small-group and clinical activities. In each course, students are required to demonstrate satisfactory professionalism in order to receive credit. The evaluation forms are completed on MedSIS, and prompt the tutor or supervisor to record any lapses in professionalism that the student has made. A small number of minor lapses are considered a normal part of a student's development, but a larger number of lapses, patterns of repeated lapses across courses, or more serious incidents are carefully reviewed by the MD Program.

  After a teacher has completed a scheduled professionalism evaluation, the student will receive an automated e-mail at the appropriate time from MedSIS.server@utoronto.ca with instructions to log in and review the evaluation. See the handbook Professionalism section for details.

- **Clinical performance evaluations**
  These are one of the principal methods of assessment in every clinical clerkship rotation. The assessment is captured in all the courses using a secure online form known as the Clinical Skills Evaluation or 'ward form.' The ward forms in all clinical clerkships feature a standard set of competenciesunder the seven CanMEDS roles. Each competency is assessed on a scale from Unsatisfactory to Outstanding. In some courses, particularly those in which students will encounter a number of different supervisors, the student's preceptor each day is responsible for completing a daily encounter card on paper, and these are then submitted to the site director and summarized at the middle or end of the rotation using the ward form. In other courses in which a student has a more continuous experience with a single supervisor, daily encounter cards are not used, and the supervisor himself/herself is typically responsible for completing the online ward form. After a supervisor has completed a Clinical Skills Evaluation, the student will receive an automated e-mail from MedSIS.server@utoronto.ca with instructions to log in, review the evaluation, and sign off on the evaluation. See a sample 'ward form.'

  NB: In all Clerkship rotations of two weeks or more, students receive a mid-rotation evaluation for formative feedback only, i.e. to give them a sense of how they are performing, so that adjustments can be made as needed in the second half of the rotation. Although this mid-rotation evaluation does not contribute to the student's grade, it is a mandatory aspect of these courses. A mid-rotation meeting is also generally scheduled for students to meet with their supervisor or site

director to review their progress towards completion of the mandatory clinical encounters and procedures for that course.

Preclerkship courses – YEAR 2

Preclerkship contacts

Preclerkship Director	
Dr. Pier Bryden pier.bryden@utoronto.ca	preclerkship.ume@utoronto.ca

Course	Course Director	Course Administrator
Mechanisms, Manifestations & Management of Disease (MMMD)	Dr. Lori Albert lori.albert@uhn.ca Dr. Hosanna Au hosanna.au@sickkids.ca Dr. Eleanor Latta lattae@smh.ca	Lina Marino lina.marino@utoronto.ca 416-946-7009 Sue Balaga (Mechanisms block) s.sarju@utoronto.ca 416-946-0136 Elizabeth Day (MAM) elizabeth.day@utoronto.ca 905-569-4618
Community Population and Public Health-2 (CPPH-2)	Dr. Allison Chris Course Director allison.chris@utoronto.ca Dr. Fok-Han Leung Associate Course Director leungf@smh.ca Dr. Mitesh Patel Associate Course Director patel.forensic@gmail.com	Roxanne Wright Community Health Placement Officer roxanneb.wright@utoronto.ca 416-978-0952 Yasmin Shariff Course Administrative Coordinator yasmin.shariff@utoronto.ca 416-978-8213 Sylvia Jao Course Administrative Assistant sylvia.jao@utoronto.ca 416-978-6860

Preclerkship courses – YEAR 2

		Frances Rankin Course Administrative Coordinator (MAM) frances.rankin@utoronto.ca 905-569-4602
Art and Science of Clinical Medicine-2 (ASCM-2)	Dr. David Wong wongdav@smh.ca	Bektu Abidta bektu.abidta@utoronto.ca 416-978-1186
Health Science Research (HSR)	Debra Katzman debra.katzman@sickkids.ca	Jennifer Ng hsr.ume@utoronto.ca 416-978-1027
Family Medicine Longitudinal Experience (FMLE)	Dr.Jordana Sacks jordana.sacks@nygh.on.ca	Brandi Corbett fmle.recruit@utoronto.ca

Block Course: Mechanisms, Manifestations, & Management of Disease (MMMD)

Course Directors	Course Administrators
Dr. Lori Albert lori.albert@uhn.ca Dr. Hosanna Au hosanna.au@sickkids.ca Dr. Eleanor Latta lattae@smh.ca	Lina Marino lina.marino@utoronto.ca 416-946-7009 Sue Balaga (Mechanisms block) s.sarju@utoronto.ca 416-946-0136 Elizabeth Day (MAM) elizabeth.day@utoronto.ca 905-569-4618

Mississauga Academy of Medicine (MAM) Faculty Site Coordinators		
Dr. Dalip Bhangu dbhangu@thc.on.ca	Dr. Dennis Di Pasquale ddipasquale@thc.on.ca	Dr. Dybesh Regmi dregmi@cvh.on.ca

Preclerkship courses – YEAR 2

Mechanisms, Manifestations, & Management of Disease (MMMD) is a 36-week course which runs throughout the second year of medical school. The first nine weeks of the course concentrate on the mechanisms of disease: the pathogenesis and the changes in disease that occur at the tissue, cellular and molecular levels and how these correlate clinically. A comprehensive understanding of the mechanisms and structural alterations produced by disease is a necessary framework with which one can plan strategies for prevention, diagnosis, and treatment. The mechanisms section covers the major categories of human disease and is divided into four major topics: genetics and genetic diseases, immunology and disorders of the immune system, microbiology (including bacteriology, virology, mycology, and parasitology), and pathology (including cellular and molecular responses to injury, inflammatory disorders, and neoplasia). A three-week Case-Based Learning Unit will take place during the first three weeks of MMMD this coming year and will cover the topics of Cell Damage, Inflammation, and Neoplasia. Information and material relevant to the cases will be made available prior to the beginning of the week, with material for week 1 made available to you before the start of second year. The format will be very similar to what you experienced last year, with fewer lectures per week, more online reference material, and CBL small group learning, as opposed to PBL (Problem-Based Learning). Following the completion of this three-week module, the schedule for MMMD will revert back to its current format, with PBL sessions beginning in Week 4.

The remaining 27 weeks of the course consist of system-based medicine and is organized with each week structured around one or more themes. The curriculum of each week has been developed by a committee from one or more of the major clinical departments (Anesthesia, Family & Community Medicine, Medicine, Obstetrics and Gynaecology, Ophthalmology, Otolaryngology, Paediatrics, Psychiatry, and Surgery). Also present will be additional mechanisms-based lectures, predominantly by members of the Department of Laboratory Medicine & Pathobiology, in association with clinical lectures; the goal of these lectures is to present an integrated approach to a disease, from tissue and cellular events, through clinical manifestations, diagnosis and therapy. Teaching in pharmacology, medical imaging, the 'leader' role, and ethics and professionalism is integrated throughout the entire curriculum.

Instruction consists of lectures, weekly problem-based tutorials, and small-group workshops. Lectures are largely concerned with providing core information needed for students to develop as Medical Experts. Problem-based tutorials and workshops build on information covered in lectures, but also allow students to develop skills in clinical decision making, communication, collaboration, health advocacy, and resource management. Small-group sessions also help to develop and promote skill in self-directed learning. Lecturers provide notes for their lectures, and these are also posted on the course website for review by

students. There is a limited amount of supplemental reading materials provided for most weeks to enhance the learning around topics covered.

These are considered part of the curriculum and may be examinable materials. Handouts may be made available for some workshops.

Overall course goals

- To provide a link between the basic sciences taught in the first year of the undergraduate medical curriculum and the clinical disciplines encountered during Clerkship
- To develop an understanding of clinical medicine and to foster the development of attitudes necessary for the practice of sound, humanistic medicine
- To further develop an approach to clinical problem solving
- To develop an understanding of the psychosocial issues surrounding disease, illness and therapy, and the ability to integrate considerations of ethics, culture, gender, family and community into the assessment of a patient

Overall (or "terminal") course objectives

At the conclusion of the course, students should be able to demonstrate the following 'terminal objectives.' They are classified under the seven CanMEDS roles, to emphasize how the course objectives are aligned with the overall MD Program competencies. The program-level comptencies are supported by each of the course objectives, as follows:

Medical Expert

- Describe current concepts of the mechanisms of disease, including etiology and pathogenesis, in relation to: Cell pathology, Environmental pathology, Immunology, Microbiology, Neoplasia, Genetic disease, Paediatric disease, Cardiovascular disorders
- Describe how structural alterations of disease correlate with clinical manifestations
- Describe common and/or life-threatening diseases in terms of their: Etiology, Pathogenesis, Clinical manifestations, Complications, Treatment, Prevention
- Provide an approach to the differential diagnosis of the major presenting problems in clinical medicine, and how to manage the problem pending the identification of the underlying cause
- Demonstrate growing competence in the gathering and interpretation of clinical data, including:
- Taking a history, performing a physical examination
- Selecting and interpreting laboratory and imaging tests
- Creating a problem list, generating a differential diagnosis and a provisional diagnosis

- Retrieve, analyze and synthesize current data and literature in order to help solve a patient problem.
- Integrate best research evidence with clinical expertise and patient values in making clinical decisions.
- Describe how physicians provide assistance to patients with managing "normal life events" including during pregnancy, childhood and adolescence, menopause, advice about lifestyle issues such as exercise, and diet, and the dying process
- Describe the following treatments of disease and illness in terms of their rationale, the mechanism of their effects, indications for each, and side effects: Management plan, Pharmacotherapeutics, Psychotherapy, Surgery (including management of trauma), Transfusion, Intravenous fluid therapy, Organ donation and transplantation, Radiation therapy, Rehabilitation, Therapy of genetic disorders, Palliative care
- Make appropriate use of medical imaging in the diagnosis of fractures, cancer, trauma and disorders of the heart and lungs

Communicator

- Further develop the ability to communicate effectively with patients, clinical colleagues and other allied health professionals
- Deliver information to patients humanely and effectively
- Contribute to a cumulative patient profile

Collaborator

- Describe in general terms the roles of other members of the health care team
- Contribute to the development of a multidisciplinary care plan

Leader

- Further develop a general understanding of the resource costs of health care interventions.
- Understand the optimal use of laboratory testing in relation to cost issues
- Help to build better teams
- Describe aspects of the organization of the health care system

Health Advocate

- Propose health promotion and disease prevention strategies for individuals and populations based on an understanding of disease mechanisms
- Demonstrate respect for diversity

- Demonstrate a deepening understanding of the doctor-patient relationship and the legal and ethical issues pertaining to it

Scholar

- Demonstrate increasing self-directed lifelong learning skills
- Demonstrate a growing capacity to teach others (peers and patients) about clinical issues

Professional

- Manage their time effectively
- Demonstrate responsibility and reliability in the learning and performance of tasks
- Demonstrate respect for instructors and peers within the educational environment
- Demonstrate a basic understanding of major concepts in bioethics and law as applied to medicine, and apply this understanding to challenges in clinical medicine
- Recognize and accept the limitations in his/her knowledge and clinical skills, and demonstrate a commitment to continuously improve his/her knowledge, ability and skills and leadership, always striving for excellence
- Develop the capacity to recognize common medical errors, report them to the required bodies, and discuss them appropriately with patients

Assessment

There are five written examinations in MMMD, occurring approximately every seven weeks. The material covered in each examination is non-cumulative, although it must be recognized that the concepts taught in the later portions of the course will assume pre-existing knowledge from earlier sections, particularly the mechanisms section and some pharmacology teaching. The examinations will be composed of multiple choice questions and short answer questions. They will address material covered in lectures, workshops, problem-based tutorials and any assigned mandatory readings (including any supplemental materials provided for the week). All examinations will be weighted equally for the purpose of calculating the final course grade.

Students will be evaluated on their participation in problem-based tutorials, and their acquisition of skills relevant to evaluating a problem, researching information and interacting as a group, however, this evaluation will be for purposes of feedback, and will not be included in calculation of the student's overall grade. PBL tutors will also complete evaluations of each student's professionalism as demonstrated during the PBL tutorials. Lapses in professionalism in PBL may constitute grounds for not achieving credit in the course.

As well, annual feedback will be provided to students regarding their performance in the Ethics and Professionalism curriculum included within the MMMD course. The feedback will not be included on the transcript.

Grading

Grading in MMMD conforms to the policy *Standards for grading and promotion of undergraduate medical students (pre-2016-17 admission) (PDF)* application of these guidelines to MMMD is as follows:

In order to achieve credit in the course, the student must meet the requirements for success in the course as listed below. As well, they must demonstrate satisfactory professional behaviour. Multiple minor lapses in professionalism, or major lapses or critical incidents, may constitute grounds for not achieving credit in the course. Students who have not met the requirements to achieve credit in the course will be presented to the Board of Examiners, and the Board will decide whether a course of remediation is appropriate. With regards to the Ethics and Professionalism component of the curriculum, students who are struggling to master the concepts taught regarding Ethics and Professionalism will be asked to meet with Dr. Erika Abner and may be required to complete additional work.

Student grades in the course are classified based on the overall average score of the five examinations, and on the scores of each of the five individual examinations as follows:

Clear 'Credit': A student who has achieved a grade of 65% or higher on each of the five examinations, AND an overall cumulative average of 70% or higher, will be deemed to have achieved credit in the MMMD course.

Clear 'No Credit': A student will be deemed to have failed to achieve credit in the MMMD course in the following situations:

If a student achieves a failing grade (<60%) on two examinations, or achieves a grade below 65% on three examinations, their performance will be reviewed by the Board of Examiners at the next available meeting. A determination will be made by the Board, taking into account all relevant factors, whether the student merits a grade of 'No Credit' and therefore requires formal remediation or whether the student will have to repeat the course.

a. If a student is required to do extra work or remediation in the course and is not successful in completing this to the required standard, then they may be presented to the Board of Examiners with the recommendation that the Board assign a grade of 'No Credit'.

b. If the student demonstrates major lapses or a significant number of minor lapses in professionalism, then this may also be considered grounds for a grade of 'No Credit' to be determined by the Board of Examiners.

Borderline: Students who achieve neither a clear 'Credit' nor clear 'No Credit' are deemed to be borderline, and will require additional work in order to achieve credit in the course. This applies to students who score below 60% on one examination or 65% on one or two of the examinations. The performance of students scoring at a borderline level will be carefully reviewed by the course co-directors and faculty members of the course committee. Based on this review, students will be required to do extra work, which may include a focused examination on the identified areas of weakness. The exact nature of the required extra work will depend on the following factors:

- The student's overall mark in the course
- The number of examinations on which they scored below 65%

Students who are identified as showing borderline performance in MMMD and requiring extra work, may also be presented to the Board of Examiners for review of their performance.

Students who score less than 70% on any of the written exams will be invited to have an interview with one of the course directors to discuss their performance and to explore what might be done to assist them in future. Students whose cumulative course average at the end of the year is between 60% and 70% will also be reviewed by the course directors and may be asked to complete extra work, if they have not already done so (additional extra work may also be required).

Although numerical grades will be used for the purpose of determining if the student achieves credit, the grade will be officially reported on the transcript as 'Credit' or 'No Credit'.

For further details, including grading regulations, see the course website on the U of T portal (http://portal.utoronto.ca – registered users only), and the program policies related to examination and assessment (http://md.utoronto.ca/policies).

NB: In order to receive credit for MMMD, students must also complete the required evaluations of teachers and of the course, as specified in the course outline, in conformity with the *Principles and Expectations for Student Completion of Teacher and Course Evaluations in UME (PDF)*. For general regulations regarding extra work requirements in Preclerkship courses, see the *Standards for the Requirement of Extra Work in the Preclerkship (PDF)*.

Recommended texts

There are no required textbooks for this course. The textbooks cited below should be of considerable value in assisting the study of the material from this course. Most of the textbooks listed below, as well as many other useful resources, are available online through the University of Toronto Libraries. There is a link to the Library on the course portal. There is a course librarian, and contact information is available on the portal. He/she can be contacted for help in locating these, or alternate resources.

Pathology:

Robbins' Pathologic Basis of Disease (8th Edition). V Kumar, A Abbas, N Fausto, J Aster. Elsevier Saunders, 2010.

Microbiology:

Schaechter's Mechanisms of Microbial Disease (5th Edition). NC Engleberg, T Dermody, V DeRita. Lippincott Williams & Wilkins, 2012.

Immunology:

Case Studies in Immunology – A Clinical Companion (5th Edition). F Rosen, R Geha. Garland Publishing Inc., 2007.

The Immune System (3nd Edition). P Parham. Garland Publishing Inc., 2009. (4th edition available in October 2014)

Genetics:

Thompson and Thompson Genetics in Medicine (7th Edition). RL Nussbaum, RR McInnes, HF Willard. Elsevier Saunders, 2007.

Obstetrics and Gynecology:

Hacker and Moore's Essentials of Obstetrics and Gynecology (5th Edition). NF Hacker, JC Gambone, CJ Hobel. WB Saunders Co., 2010.

Ophthalmology:

American Academy of Ophthalmology "Basic Ophthalmology for Medical Students and Primary Care Residents, 9th ed" by R. Haper, 2010.

Pediatrics:

Nelson's Essentials of Pediatrics (5th Edition). RM Kliegman et al. Elsevier Saunders, 2011.

Family Medicine:

Essential Family Medicine Fundamentals & Cases (3rd Edition). RE Rakel. WB Saunders Co., 2006.

Primary Care Medicine (7th Edition). AH Goroll, AG Mulley Jr. JB Lipincott Company, .

Family Medicine: Ambulatory Care and Prevention (5th Edition). MB Mengel, LP Schwiebert. McGraw-Hill, 2008

Family Medicine Handbook (5th Edition). MA Graber, JL Jones, JK Wilbur. Mosby, 2006.

The Canadian Task Force on Preventive Health Care : http://canadiantaskforce.ca/

Mosby's Family Practice Sourcebook: An Evidence-Based Approach to Care (4th Edition). M Evans. Mosby, 2006.

Psychiatry:

Clinical Psychiatry for Medical Students (3rd Edition). Stoudemire. Lippincott, 1998.

Diagnostic and Statistical Manual of Mental Disorders (5th Edition). American Psychiatric Association, 2013.

Kaplan and Sadock, Synopsis of Psychiatry (10th Edition). Williams and Wilkins, 2007.

Surgery:

Essentials of General Surgery (4th Edition). PF Lawrence ed. Lippincott, Williams and Wilkins, 2006.

Essentials of Surgical Specialties (3rd Edition). PF Lawrence ed. Lippincott, Williams and Wilkins, 2007.

Current Surgical Diagnosis and Treatment (11th Edition). LW Way, GM Doherty, eds. Lange, 2010.

Schwartz's Principles of Surgery (9th Edition). FC Brunicardi et al. McGraw-Hill, 2010. (Available on STATref).

Gastroenterology:

First Principles of Gastroenterology (5th Edition), ABR Thomson and EA Shaffer. Janssen-Ortho.

Handbook of Liver Disease (3rd Edition) L Friedman and EB Keeffe. Elsevier Saunders, 2012.

Medicine:

Andreoli and Carpenter's Cecil Essentials of Medicine (8th Edition). T Andreoli ed. WB Saunders, 2010.

Harrison's Principles of Internal Medicine (18th Edition). AS Facui et al., eds. McGraw-Hill, 2011.

Urology:

Campbell-Walsh Urology (10th Edition). AJ Wein et al., Elsevier, 2012.

General References:

How to Break Bad News. A Guide for Health Care Professionals. R Buckman. Johns Hopkins University Press, 1992.

Doing Right. A Practical Guide to Ethics for Medical Trainees and Physicians. PC Hebert. Oxford University Press, 1996.

Preclerkship courses – YEAR 2

Continuity Course: The Art & Science Of Clinical Medicine-2 (ASCM-2)

Course Director	Course Administrator
Dr. David MC Wong wongdav@smh.ca	Bektu Abidta bektu.abidta@utoronto.ca 416-978-1186

Site Directors:

Academy	Site	Site Director
FitzGerald	SMH	Dr. Jonathan Ailon aillonj@smh.ca
FitzGerald	SJHC	Dr. Suzanne Lilker slilker@rogers.com
Mississauga	MH	Dr. Lori Coman-Wood lori.coman.wood@utoronto.ca
Mississauga	CVH	Dr. Jeff Myers jeffrey.myers@trilliumhealthpartners.ca
Peters-Boyd	SHSC	Dr. Michael Bernstein michael.bernstein@sunnybrook.ca
Peters-Boyd	WCH	Dr. Savannah Cardew savannah.cardew@wchospital.ca
Peters-Boyd	NYGH	Dr. Yashi Yathindra yashi.yathindra@gmail.com
Wightman-Berris	MSH	Dr. Yash Patel ypatel@mtsinai.on.ca
Wightman-Berris	UHN	Dr. Diana Tamir diana.tamir@uhn.ca
Wightman-Berris	Michael Garron Hospital	Dr. Michelle Lockyer michelle.lockyer@utoronto.ca

Block Coordinators:

Block	Coordinator
Paediatrics	Dr. Julie Johnstone julie.johnstone@sickkids.ca

Preclerkship courses – YEAR 2

Psychiatry	Dr. Adrian Grek agrek@mtsinai.on.ca
Ophthalmology	Dr. Daniel Weisbrod dan.weisbrod@utoronto.ca
Geriatrics	Dr. Thirumagal Yogaparan tyogaparan@baycrest.org Dr. Mireille Norris mireille.norris@sunnybrook.ca
MSK	Dr. Lori Albert lori.albert@uhn.ca
ENT	Dr. Brad Hubbard brad.hubbard@utoronto.ca

Course overview

This course continues clinical skills instruction in the second year via 35 half-day sessions, which are scheduled on Thursday mornings. Students in the course are, for the most part, organized into Academy-based groups of six students. The course builds on previously learned skills in history and physical examination in ASCM-1 and focuses on students learning more advanced skills in history-taking and physical examination. The components of the written case report are reviewed and strengthened. Students improve skills in performing an oral case presentation. The skill of performing a focused history and physical examination is introduced early in the course and students then build on this skill as the course progresses. Students learn to integrate knowledge of states of health and illness into their history-taking in order to perform a focused history and physical and to formulate a differential diagnosis.

The course is divided into several sessions led by one or two core tutors and blocks of sessions devoted to specialized learning in geriatrics, paediatrics, psychiatry, and other specialty areas. Specific skills are taught in the following dedicated sessions: the musculoskeletal system; orthopaedics; the back examination; the breast examination; the male genital-urinary system; the peripheral vascular system; the neurological system; the acute abdomen; and the ophthalmological and otolargyngological examinations.

Core sessions allow groups to review and strengthen history taking and physical examination and to practice presentation skills. Students also have the opportunity to learn and use an electronic medical system during patient encounters. Specialized core sessions focus on performing a palliative care history, a sexual history and HIV test counselling, and learning to perform a female pelvic examination. During core sessions, students and tutors should identify and direct learning where needed for the individual learner.

In addition, students will have an opportunity to discuss and reflect on their training through five Portfolio sessions that are integrated with the current curriculum. These sessions will provide students the opportunity to reflect on their ultimate goal – developing their identity as doctors and shaping the way in which they conduct themselves in their future practice of medicine.

Interviewing skills, communication skills, empathy, and professionalism are emphasized. During most ASCM-2 sessions there is an opportunity for a clinical encounter. Observation of students and feedback by tutors is emphasized.

Course objectives

By the end of ASCM-2, the student should be able to:

Medical Expert

- Obtain a complete and focused medical history
- Perform a complete physical examination
- Present the findings from the history and physical examination
- Know about all aspects of common and life-threatening illness and all MCC clinical presentations
- Interpret laboratory and imaging tests
- Integrate clinical data into a diagnostic formulation
- Demonstrate therapeutic and management skills (in specific contexts)
- Retrieve best evidence
- Understand the goals and principles of infection control

Communicator

- Communicate effectively in multiple ways with patients and families

Collaborator

- Exhibit honesty, fairness and compassion towards patients, peers and other members of the heath care professions

Health Advocate

- Work effectively with colleagues

Scholar

- Demonstrate appropriate self-directed learning skills

Professional

- Exhibit honesty, fairness and compassion towards patients, peers and other members of the health care professions
- Maintain confidentiality of patient data
- Manage time and workload effectively

Assessment

Component	% of Final Grade
OSCE	50
Observed History and Physical	20
Written Reports (2)	15 (7.5 each)
Oral Presentations (2)	15 (7.5 each)
Observed Technical Assessment Log	Credit/No Credit (students are required to complete and return the Observed Technical Assessment Log in order to pass the course)
Portfolio Written Assignment	Credit/No Credit
Professionalism	Credit/No Credit (students have a mid-year and a year-end evaluation of professionalism, and are required to demonstrate satisfactory professional behaviour in order to pass the course)

Grading

ASCM-2 is transcribed as Credit/No Credit. The grade in ASCM-2 is derived from the grades obtained in the course components.

Students are required to pass all course components in order to pass the course, by scoring at least 60% on each component, and a grade of 'credit' for portfolio assignment, professionalisms and for the observed technical assessment log. Students are expected to have mastered the basic skills of history-taking and physical examination in order to pass the course. Students must pass the OSCE in order to pass the course. The OSCE is a 10-station examination and students must achieve a minimum score of 60% and pass seven stations in order to pass the exam.

Marks between 60-69% in any component are considered borderline and students scoring in this range on any component may be required to complete extra work in order to meet the requirements of the course.

Students are expected to exhibit the attributes of professionalism in order to pass the course.

For further details, including grading regulations, see the course website on the U of T portal (http://portal.utoronto.ca – registered users only), and the program policies related to examination and assessment (http://md.utoronto.ca/policies).

NB: In order to receive credit for ASCM-2, students must also complete the required evaluations of teachers and of the course, as specified in the course outline, in conformity with the *Principles and Expectations for Student Completion of Teacher and Course Evaluations in UME (PDF)*.

For general regulations regarding extra work requirements in Preclerkship courses, see the *Standards for the Requirement of Extra Work in the Preclerkship (PDF)*.

Students who fail any component of the course or who are borderline in more than one component will normally be presented to the Board of Examiners for review. In the case of such inadequate performance, including unprofessional behaviour, supplemental or remedial work and/or examinations will be recommended by the course director to the Board of Examiners. Students granted supplemental or remedial privileges by the Board of Examiners must successfully complete the work or examinations prior to commencing the Clerkship.

Required texts

1. Bickley, L., R. Hoekelman, *Bates' Guide to Physical Examination and History Taking,* 11th ed., Lippincott, Philadelphia, 2013.
2. Course Book – The Art and Science of Clinical Medicine 2, 2016-2017
3. The ASCM Preclerkship Clinical Skills Handbook
4. The ASCM 2 Paediatric Examination Handbook
5. Learning resources on the course website on the Portal.

*Students may also use The Medical Society's handbook (but this companion book should be used only in addition to the recommended textbooks on physical examination): Woganee Filate, Rico Leung, Dawn Ng, Mark Sinyor., *Essentials of Clinical Examination Handbook* , 5th ed., 2005 (or most recently edited version).

Preclerkship courses – YEAR 2

Continuity Course: Health Science Research (HSR)

Course Directors	Course Administrators
Debra Katzman debra.katzman@sickkids.ca 416-813-5084	Jennifer Ng hsr.ume@utoronto.ca 416-978-1027

Health Sciences Research Committee		
Pier Bryden	Marcus Law	Martin Schreiber
Allison Chris	Eric Monteiro	Elena Springall
Alan Fung	Joyce Nyhof-Young	Neil Sweezey
Tim Guimond	Jason Pennington	Ross Upshur
Ilana Jaye Halperin	Richard Pittini	Fiona Webster
Moira Kapral	Heather Sampson	Albert Wong

Course overview

Health Science Research (HSR) is part of the first-two years of the four-year MD Program curriculum. In 2016/17, HSR consists of three large group sessions in the first year of the Foundations Curriculum, and a fully developed self-contained course in the second year of the traditional preclerkship (which will be in its final year). In 2017/18, HSR will be a two-year longitudinal component within the Foundations Curriculum. http://www.md.utoronto.ca/preclerkship-foundations

HSR is an introduction to the principles of research, directed at helping students understand and use research to contribute to improving the health of people and populations, including First Nations, Inuit and Metis peoples, in Canada and globally.

Three major foci of the course are: (i) to develop students' understanding of qualitative and quantitative methodologies and techniques; (ii) to help them appreciate translational research; and (iii), to facilitate their understanding and application of the critical appraisal criteria to clinical practice.

Course objectives

The HSR course objectives are linked closely with the Scholar Role objectives and competencies, and the Medical Council of Canada 'Scholar' Objectives and the Indigenous Physicians Association of Canada/Association des Médecins Indigènes du Canada scholar objectives and competencies. Finally, the

Preclerkship courses – YEAR 2

HSR course is committed to the important work done by the Truth and Reconciliation Commission of Canada (2015) and endeavors to integrate the calls to action endorsed by the MD Program.

At the completion of HSR, students should be able to:

(1) Describe the relationship between scientific endeavor and clinical practice
(2) Describe the concepts and application of translational research
(3) Contribute to the work of a research project
(4) Identify and apply research evidence to the care of patients, populations, health systems and policy
(5) Describe the model for improvement

Terminal Objectives	Enabling Objectives
A. Describe the relationship between scientific endeavor and clinical practice.	1. Describe the basic scientific principles of research, including the epistemological underpinnings of science. 2. Describe the relationship between evidence and uncertainty. 3. Define the varied meanings and applications of evidence in a clinical context. 4. Demonstrate an appreciation for the limitations of evidence in clinical contexts.
B. Describe the concepts and application of translational research.	1. Describe the translational research pathway. 2. Demonstrate an understanding and appreciation of the diversity and breadth of research. 3. Demonstrate ways to acknowledge and value Indigenous knowledge.
C. Contribute to the work of a research project	Describe and contribute to the basic components of a research project, as described below: *Research Question* 1. Formulate a research question in an area of inquiry that is of interest to the student. 2. Describe the characteristics of a well-constructed research question.
	Background and significance 1. Formulate a specific question in order to guide the design of a literature search.

	2. Demonstrate the use of technology to search the relevant literature efficiently for evidence in order to answer a research or clinical question. 3. Evaluate information resources in order to select the best source for the information needed. 4. Critically appraise and interpret relevant research and scientific literature (including its cultural context). 5. Summarize and synthesize the results of the retrieved research and literature. 6. Apply the results of the search process to the identified research question. 7. Manage research and literature using an appropriate citation manager.
	Design and Implementation 1. Describe and apply both quantitative research (e.g., laboratory experiments, clinical trials) and qualitative research (e.g. phenomenology, ethnography, grounded theory, case study) used in health science research, including the advantages and limitations of each. 2. Identify alternative and /or new ways to create evidence (e.g., mixed methods, quality improvement). 3. Propose which study designs are best suited to address specific types of research questions. 4. Describe various ways of respectfully and transparently acquiring information about First Nations, Inuit, Metis, and other populations, which involve communities as research partners. 5. Identify appropriate procedures for sampling, implementation, data collection and analysis for both qualitative and quantitative studies and understand the logic underlying the experiments or data collection proposed. 6. Describe analytical approaches and limitations for qualitative analyses (e.g. coding, thematic analyses) and

	quantitative analyses (e.g. sample size and power calculations; p-values and confidence intervals; bivariate and multivariable statistics for both categorical and continuous data). 7. Describe measurement issues (e.g. validity and reliability, sensitivity, specificity, positive predictive value, negative predictive value) and ways to report effect sizes (e.g. relative risk, odds ratio, attributable risk, number needed to treat). 8. Describe strategies for establishing the trustworthiness of qualitative data analysis (e.g., member checking, triangulation, interviewer corroboration, peer debriefing, prolonged engagement, negative case analysis, confirmability, bracketing, audit trails). 9. Describe the concepts of efficacy, effectiveness, and efficiency.
	Research ethics 1. Describe the ethical principles applicable to animal and human research, particularly in the Canadian context. 2. Describe the appropriate use and acceptability of animals in research, teaching, and testing as outlined in the Canadian Council on Animal Care *Policy Statement*. 3. Appropriately apply the ethical principles and policies described and mandated by The Canadian *Tri-Council Policy Statement 2: Ethical Conduct for Research Involving Humans* with specific emphasis on informed consent, harms and benefits and vulnerable populations. 4. Identify and critically analyze fundamental ethical principles as they apply to research and scholarly inquiry. 5. Adhere to responsible practices and ethical behaviors when contributing to or participating in research.
	Interpretation of Novel Research Findings 1. Assess the quality of information, using principles of critical appraisal.

	2. Draw valid conclusions from quantitative and qualitative data. 3. Interpret research findings for patients and populations, in a manner that promotes community input and community identification of relevant health issues and needs.
	Dissemination of Results 1. Communicate and discuss effectively with peers and professionals in written reports and oral presentations, the finding of applicable studies and reports. 2. Describe appropriate strategies for working with First Nations, Inuit and Metis, and other populations in adherence to OCAP (ownership, control, access, and possession) principles to share and promote more appropriate health-related information.
D. Identify and apply research evidence to the care of patients. populations, health systems and policy	In response to a clinical patient problem or population health issue where there is a need for additional information to support decision-making: 1. Formulate a clear and usable question to guide the search for an answer. 2. Use an effective search strategy to identify relevant literature. 3. Summarize, critically appraise, interpret and synthesize the results of retrieved reports. 4. Demonstrate autonomy and independence in critically evaluating evidence. 5. Apply the results of the search process to the identified clinical issue using principles of shared decision-making. 6. Identify and critically analyze ethical principles as they have been applied, or not applied, to research globally, while working within the Canadian context. 7. Discuss how the results of medical research can be translated to improve the clinical care of patients and populations and improve understanding of the mechanisms of disease. 8. Discuss how the results of research can be translated to

	improve health services, health systems and policy.
E. Describe the model for improvement	1. Recognize that quality improvement methodologies are grounded in science and represent legitimate forms of scholarship. 2. Appreciate the difference between quality improvement and traditional research. 3. List the three questions that underpin the model for improvement. 4. Define the PDSA cycle.

Learning Modalities

HSR employs the following learning modalities:

(1) **E-modules and Self-Study Time**: The e-modules are designed to provide a foundation in the principles and application of research. The key information and core knowledge presented in the e-modules are designed to help the student develop their practicum exercise.

(2) **Tutorial Sessions:** These small group sessions are Academy based and provide opportunities for students to discuss and apply (through structured tutorial activities) HSR material in a small group format

(3) **Grand Round Lecture**s: There are two lectures per academic year and they include presentations by preeminent experts in health science research on the latest and evolving areas related to the overriding principals of the HSR course.

(4) **Practicum Exercise:** The practicum exercise is a longitudinal exercise that will allow the student to apply the core research knowledge they learn in the HSR course. This exercise is intended to address a component of the human translational pathway from one of the four Canadian Institutes of Health Research (CIHR) pillars http://www.cihr-irsc.gc.ca/e/193.html. Those students with previous research experience will be expected to engage in a practicum exercise that is from a new and different CIHR pillar, in an effort to enhance and broaden their research skills.

Preclerkship courses – YEAR 2

Course structure

HSR is divided into nine main themes set out below. Each theme has associated:

- Learning objectives
- E-modules
- Required reading or other pre-tutorial activity preparation
- Other resources

This information is available for each theme in a synopsis format on HSR website.

Themes
1. What is the research process?
2. Asking a research question
1. Finding the Evidence: Searching & managing
2. Quantitative Research
3. Qualitative Research
4. Research ethics and integrity
5. Critical Appraisal
6. Relationship between scientific endeavor and clinical practice
7. Quality Improvement: An Alternative Approach to Creating Evidence

Assessment

Activity to be Evaluated	Method of Evaluation	% of Final Evaluation
E - MODULES	Pre-tests (September 2016 and January 2017 - Required)	0%
	E-module post-theme tests (Required)	0%
	Mid-Term Exam	20%
	Final Exam	20%
PRACTICUM EXERCISE	Written Practicum*	25%

	Oral Presentation*	15%
TUTORIAL	Tutor Evaluation*	20%

*All evaluation rubrics are posted on the HSR website.

Students must achieve a passing grade on each of these components in order to pass the course. For components of the course that contribute to the final percentage grade, the passing grade is 60%. Students will be assigned extra work for a failed or borderline performance (60-69%).

Students will normally be presented to the Board of Examiners under the following circumstances:

- An overall course grade below 60%
- Failure to achieve a passing grade on more than one component
- Unsuccessful upon reassessment of extra work required for a component that was initially failed
- Significant lapses of professionalism

The Board of Examiners will then determine next steps, e.g. if the student is required to complete remedial work in the areas of identified weakness, and when such remedial work needs to take place.

For further details, including grading regulations, see the course website on the U of T portal (http://portal.utoronto.ca – registered users only), and the program policies related to examination and assessment (http://md.utoronto.ca/policies).

NB: In order to receive credit for HSR, students must also complete the required evaluations of teachers and of the course, as specified in the course outline, in conformity with the *Principles and Expectations for Student Completion of Teacher and Course Evaluations in UME (PDF)*.

For general regulations regarding extra work requirements in Preclerkship courses, see the *Standards for the Requirement of Extra Work in the Preclerkship (PDF)*.

Required texts

For a complete list of required readings, please see the HSR Portal site.

Preclerkship courses – YEAR 2

Continuity Course: Family Medicine Longitudinal Experience (FMLE)

Course Director	Course Administrator
Dr. Jordana Sacks jordana.sacks@nygh.on.ca	Brandi Corbett fmle.studentliaison@utoronto.ca

During FMLE, students participate in community-based family medicine clinics on six Monday and/or Wednesday afternoons spread out through the second year of the program. Students are assigned preceptors through a match process, after which the six clinic dates are arranged and agreed on jointly by the student and preceptor from a list of possible dates supplied by the University.

The goal of FMLE is for students to develop an appreciation of the importance of generalist specialties and of family medicine in particular, including an understanding of the role family physicians play within the health care system. In addition, students will have some exposure to important issues in our health care environment such as physician distribution, physician remuneration, primary care reform, and social accountability.

During FMLE, students also practise some of the history-taking and physical examination skills learned in ASCM-1 and ASCM-2. They also learn about the family medicine-based clinical S.O.A.P. ('Subjective, Objective, Assessment, Plan') note and practice documentation using an Electronic Medical Record (EMR)-type document.

Course objectives

The FMLE Course Objectives are derived from the CanMEDS-FMU Objectives* and support the MD Program Comptencies**. Upon successful completion of the FMLE, the student should be able to:

CanMEDS-FMU Objective*	Course Objective	MD Program Objective(s) supported**
FM Expert: 1.5 FM Communicator 2.5	1. Use the patient-centred clinical method (including a patient-centred interview) to conduct a supervised office visit.	Medical Expert 2 Communicator 1
FM Expert 1.3	2. Use patient-centred record keeping when caring for patients	Medical Expert 2 Communicator 1
FM Health Advocate	3. Recognize the health needs of an individual	Medical Expert 2

5.1	patient and how to work with this patient to improve their health.	Health Advocate 1
FM Communicator 2.1	4. Identify that the patient-physician relationship is central to the practice of family medicine in allowing therapeutic relationships with patients to develop.	Health Advocate 1 Professional 1
FM Expert 1.13	5. Demonstrate an appreciation of the value of continuity of care for developing a deep knowledge of patients.	Health Advocate 1

CanMEDS-FMU Objective*	Course Objective	MD Program Compentencies supported**
FM Manager 4.1	6. Demonstrate an understanding of the role of the family physician, family medicine and primary health care in the overall function of the health care system including family physician roles in office based care	Leader 1
FM Scholar 6.1	7. Engage in self-directed learning based on reflective practice (e.g. read around cases).	Scholar 1
FM Collaborator 3.2.1 FM Professional 7.1.2 FM Collaborator 3.2.4	8. Create and maintain a positive working environment by: I. Demonstrating a respectful attitude towards other colleagues, other health care professionals and/or members of the health team and patients and their families. II. Demonstrating professionalism in all aspects of care.	Collaborator 1 Professional 1

*CanMEDS-FMU can be found at:
http://www.cfpc.ca/uploadedFiles/Education/CanMEDS-FMU_Feb2010_Final_Formatted.pdf
**MD Program Comptencies can be found at:

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http://md.utoronto.ca/competencies

Assessment

- Midterm report (50%)
- Final report (50%)
- Professionalism evaluation (Credit/No Credit)

For details, including grading regulations, see the course website on the U of T portal (http://portal.utoronto.ca – registered users only), and the program policies related to examination and assessment (http://md.utoronto.ca/policies).

NB: In order to receive credit for FMLE, students must also complete the required evaluations of teachers and of the course, as specified in the course outline, in conformity with the *Principles and Expectations for Student Completion of Teacher and Course Evaluations in UME (PDF).*

For general regulations regarding extra work requirements in Preclerkship courses, see the *Standards for the Requirement of Extra Work in the Preclerkship (PDF)*.

Preclerkship courses – YEAR 2

Continuity course: Community, Population and Public Health-2 (CPPH-2)

Course Directors	Course Administrators
Dr. Allison Chris Course Director allison.chris@utoronto.ca Dr. Fok-Han Leung Associate Course Director leungf@smh.ca Dr. Mitesh Patel Associate Course Director patel.forensic@gmail.com	Roxanne Wright Community Health Placement Officer roxanneb.wright@utoronto.ca 416-978-0952 Yasmin Shariff Course Administrative Coordinator yasmin.shariff@utoronto.ca 416-978-8213 Sylvia Jao Course Administrative Assistant sylvia.jao@utoronto.ca 416-978-6860 Frances Rankin Course Administrative Coordinator (MAM) frances.rankin@utoronto.ca

Course overview

The Community, Population and Public Health (CPPH) courses take place in first-year (CPPH-1) and second year (CPPH-2). There is also related teaching offered in the clerkship, particularly during Transition to Clerkship and Transition to Residency. Jointly, these course offerings introduce students to a population and community health perspective on medical practice.

CPPH fosters the development of future physicians' responses to changing community and societal needs and concerns. As a result of completing the course work in CPPH, U of T medical graduates will have the foundation of necessary knowledge, skills and attitudes to form appropriate alliances with patients, other health care professionals and community organizations to the benefit of the individual patient and community as a whole. Their practice will be population-health oriented and evidence-based. They will be aware of factors and resources needed to promote health and wellness and be able to integrate this knowledge effectively into clinical practice.

CPPH objectives are linked closely with the CanMEDs Roles and the Medical Council of Canada 'Medical Expert' Objectives in Population Health.

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CPPH-2 is the continuation of CPPH-1 in second year. There are eight scheduled CPPH-2 sessions on Wednesday afternoons during the academic year. All CPPH-2 sessions are dedicated to the Community-Based Scholarship and Service-Learning (CBS) field experience that students commenced in CPPH-1. CBS is a longitudinal field experience that starts in the spring of CPPH-1 and concludes at the end of CPPH-2. Students are partnered with a community organization where they engage in meaningful work, while answering questions connected to topics in community and population health. Students will share their CBS experience at an academy-based forum.

Course schedule

All sessions are scheduled on Wednesday from 1 - 5p.m.

Sept 21st 2016	Field Experience
Oct. 26th 2016 1:00pm – 2:30pm 3:00pm – 5:00pm	 Tutorial 1 Field Experience
Nov 2nd 2016	Field Experience
Nov 23rd 2016	Field Experience
Jan 11th 2017 1:00pm – 2:30pm 3:00pm – 5:00pm	 Tutorial 2 Field Experience **Submission:** Community Case Reflection
Jan 25th 2017	Field Experience
Feb 22nd 2017	Field Experience
Apr 5th 2017	Community Forum Submission Task 3 Task 4 Community Collaboration and Professionalism Form

CPPH course objectives

CanMEDs role	#	Objective: The medical graduate should be able to:

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CanMEDs role	#	Objective: The medical graduate should be able to:
Medical Expert	1.	Assess the health status of individuals and of populations, in terms of the impact of determinants of health.
	2.	Apply principles of health promotion, health protection and disease prevention (including the use of screening tests) in the management of the health of individuals and populations.
	3.	Work together with public health to manage the health of individuals in situations that require public health intervention, including those subject to legal requirements.
	4.	Describe the roles of physicians and public health in the identification of health problems in the community, and their role in diagnosis and management of these problems.
	5.	Work together with community-based agencies to support patient care and community health.
	6.	Use epidemiological methods and data and other appropriate information sources to describe and assess the health of individuals and populations, and to assist in the diagnosis of disease.
Communicator	7.	Communicate and interact effectively and sensitively with patients of different cultures and socio-economic backgrounds.
	8.	Communicate and interact effectively and respectfully with staff at community-based and public health agencies.
	9.	Communicate effectively both verbally and in writing about issues in the domain of CPPH.
Collaborator	10.	Understand the roles played by the physician, public health and community-based agencies in the health system.
	11.	Describe how to establish partnerships with community-based agencies and public health in support of the care of individuals and populations.
Leader	12.	Describe the basic features and complexities of the local, provincial/territorial and federal health systems in Canada and the roles of physicians in each of these domains.
	13.	Participate in the analysis of a community or public health problem, and understand the development of a plan that addresses these problems.
	14.	Work effectively in teams that include physicians, other health professionals and others in the domain of CPPH.

Preclerkship courses – YEAR 2

CanMEDs role	#	Objective: The medical graduate should be able to:
	15.	Describe how population-based approaches to health care services can improve medical practice and participate in the evaluation of this.
Health Advocate	16.	Address the unique health needs and barriers to access to appropriate health and social services of specific populations, including but not limited to persons of Indigenous descent, immigrants, refugees, persons with disabilities and persons identifying as LGBTQ.
	17.	Understand efforts to reduce health inequities in clinical practice and at the population level, locally and globally.
	18.	Demonstrate methods of advocacy to improve the health and wellbeing of individuals and describe how to advocate effectively to improve population health.
	19.	Accept appropriate responsibility for the health of populations.
	20.	Describe how public policy impacts on the health of the population served.
	21.	Participate in community activities directed at improving health.
	22.	Inform, educate and empower individuals and groups about health issues.
Scholar	23.	Understand the methods, tools, and applications of research in community, population and public health; recognize how these relate to biomedical and clinical research; and, appraise the results of such research and apply these appropriately to clinical practice.
	24.	Demonstrate the capacity to maintain competence in the domain of CPPH through lifelong learning.
Professional	25.	Apply the professional codes, relevant legislation and ethical frameworks of community, population and public health in the care of individual patients and in managing the health of populations.
	26.	Demonstrate professionalism in all interactions with patients, colleagues, and other members of the health team in the context of CPPH, including: • Altruism • Honesty • Integrity • Reliability • Responsibility • Compassion

Teaching methods

CPPH-2 focuses on the CBS longitudinal field experience to offer students practical learning experiences and context in which to apply the foundational material learned in CPPH-1. The eight CPPH-2 sessions include time to pursue the field experience, two academy-based tutorials to provide students the opportunity to reflect on the CBS field experience and optional course readings selected to support the CBS experience.

Assessment

The following assessments are included in CPPH-2:

Assessment	Contribution to course grade:	For more information/due:
CBSL Workplan	15%	Assessment: CBSL Workplan September 30, 2016
CBS Case reflection	15%	Assesment CBSL Case Reflection Tutorial #2 January 17, 2017
CBS Task 3: Placement summary and reflection	20 %	Asessment Task #3 April 5, 2017
CBS Task 4: Field Experience presentation	40%	Assessment Task #4 April 5 2017
Community Professionalism and Collaboration	10 %	Assessment: Community Professionalism and Collaboration April 13, 2017
Total	100%	

Students must pass each component of the course in order to receive credit for the course. For all of the components which contribute a percentage to the final grade, students must achieve a score of at least 60% to pass. Students who do not pass any of the components will be required to complete extra work, with reassessment.

For details, including grading regulations, see the course website on the U of T portal (http://portal.utoronto.ca – registered users only), and the program policies related to examination and assessment (http://md.utoronto.ca/policies).

NB: In order to receive credit for CPPH-2, students must also complete the required evaluations of teachers and of the course, as specified in the course outline, in conformity with the *Principles and Expectations for Student Completion of Teacher and Course Evaluations in UME (PDF)*.

For general regulations regarding extra work requirements in Preclerkship courses, see: *Standards for the Requirement of Extra Work in the Preclerkship (PDF)* on the MD Program website (http://md.utoronto.ca/policies).
Students will normally be presented to the Board of Examiners under the following circumstances:

- An overall course grade below 60%
- In the event the student has been required to do extra work on a component, and upon reassessment of that component the grade is still below the required standard
- Failing to achieve a passing grade on more than one component
- Significant lapses of professionalism

The Board of Examiners will then determine if the student is required to complete remedial work in the areas of identified weakness, and when such remedial work needs to take place.

ii. Assessment of Professionalism

Because medicine is a profession, students in medical school must conduct themselves in a professional manner. In CPPH, **professional conduct is expected from all students at all times** – in the classroom, in Medical Education offices, during tutorials, and on field experiences. Professionalism is an important component of this course and students must pass this component to achieve credit for this course. The standards on professional conduct as stated by the MD Program are available on the CPPH website. Demonstration of professional behaviour will be noted in all areas of the course.

Evaluation of the CPPH-2 course

Evaluation by students:
This course has been developed with extensive student input. Student feedback is requested during the semester following lectures to allow for in-term adjustments and at the end of each semester.

Evaluation by tutors, lecturers, and community partners:

The course depends on the skills and knowledge of our excellent lecturers, tutors, and preceptors who deliver a substantial proportion of the course, and their comments and feedback are important. Evaluation forms are provided to them at the end of each semester.

Review by the CPPH-2 Course Committee:

All of these sources of information are summarized and presented to the Committee to evaluate the course. It is important that the course be evaluated from a number of perspectives and thus different aspects are assessed at different times and by different methods.

Required text

The required text for the CPPH course is the *PHEN Primer on Population Health*, a virtual textbook accessed at http://www.afmc-phprimer.ca/. The PHEN Primer on Population Health is a resource created under the sponsorship of the Association of Faculties of Medicine of Canada (AFMC) by the Public Health Educator's Network (PHEN), and made possible through funds provided by the Public Health Agency of Canada. The PHEN includes representatives from 17 Medical Faculties in Canada who have worked collaboratively with experts, students, teachers and other stakeholders to review the Primer on Population Health. This text covers the objectives of population health from the Medical Council of Canada, it presents a perspective on population-health and it demonstrates the relevance of concepts of population health to health professionals engaged in clinical care. Additional readings may come from variety of sources including "Public Health and Preventive Medicine in Canada" by Chandrakant P. Shah, 5th edition, Excelsior Press, 2003 and selected websites and other online sources.

Clerkship Curriculum – YEARS 3 & 4

Clerkship contacts

Clerkship Director	Senior Clerkship Coordinator
Dr. Stacey Bernstein stacey.bernstein@sickkids.ca	Tim Flannery tim.flannery@utoronto.ca 416-978-6941
	Clerkship Coordinator
	Samantha Fortunato samantha.fortunato@utoronto.ca 416-946-5208

YEAR 3

Course	Course Director	Course Administrator
Transition to Clerkship	Dr. Tatiana Freire-Lizama Freire-LizamaT@smh.ca	Susan Rice s.rice@utoronto.ca/ 416-978-2188
Anesthesia	Dr. Ahtsham Niazi ahtsham.niazi@uhn.ca	Katia Malyuzheinets katia.malyuzhinets@utoronto.ca/ 416-946-0926
Dermatology	Perla Lansang perlalansang@gmail.com	Lucy Kudelkina lucy.kudelkina@sunnybrook.ca /416-480-6100 x4995
Emergency Medicine	Dr. Laura Hans hansl@smh.ca	Nancy Medeiros em.undergrad@utoronto.ca / 416-586-5058
Family & Community Medicine	Dr. Azadeh Moaveni Azadeh.moaveni@uhn.ca	Cheryl O'Donoghue dfcm.clerkship@utoronto.ca / 416-978-1896
Medicine	Dr. Danny Panisko danny.panisko@uhn.ca	Sumitra Robertson med.undergrad@utoronto.ca / 416-978-6766
Obstetrics & Gynaecology	Dr. Rajiv Shah rajivrobert.shah@utoronto.ca	Jeannette Moniz obgyn.ug@utoronto.ca / 416-946-0305

Ophthalmology	Dr. Daniel Weisbrod dan.weisbrod@utoronto.ca	educationdovs@utoronto.ca / 416-978-6294
Otolaryngology	Dr. Allan Vescan allan.vescan@sinaihealthsystem.ca	Michael Figueiredo mike.figueiredo@utoronto.ca / 416-946-8743
Paediatrics	Dr. Angela Punnett angela.punnett@sickkids.ca	Mary Antonopoulos mary.antonopoulos@sickkids.ca / 416-813-6277
Psychiatry	Dr. Raed Hawa raed.hawa@uhn.ca	undergrad.psych@utoronto.ca / 416-979-6838
Surgery	Dr. George Christakis george.christakis@sunnybrook.ca	Shibu Thomas shibu.thomas@utoronto.ca / 416-978-6431
Portfolio	Nirit Bernhard portfolio.director@utoronto.ca	Melissa Casco portfolio.ume@utoronto.ca / 416-978-7327
Integrated OSCE	Dr. Brian Simmons (Chief Examiner) Brian.simmons@sunnybrook.ca	Samantha Fortunato samantha.fortunato@utoronto.ca / 416-946-5208

YEAR 4

Course	Course Director	Course Administrator
Electives	Dr. Seetha Radhakrishnan seetha.radhakrishnan@sickkids.ca	Rockiel Austin electives.uoft@utoronto.ca / 416-978-0416
Portfolio	Dr. Nirit Bernhard portfolio.director@utoronto.ca	Melissa Casco portfolio.ume@utoronto.ca / 416-978-7327
Transition to Residency	Dr. Seetha Radhakrishnan (Co-Director – Selectives) seetha.radhakrishnan@sickkids.ca Dr. Tatiana Freire-Lizama (Co-Director-Campus-Based Teaching) Freire-LizamaT@smh.ca	Ezhil Mohanraj ttr.ume@utoronto.ca / 416-978-2763

View the contact information of Academy Directors.

Clerkship Curriculum – YEARS 3 & 4

Curriculum design

Clerkship is 76 weeks long, and is divided into year 3 (51 weeks) and year 4 (25 weeks).

Transition to Clerkship (TTC) occurs in the first three weeks of Clerkship. This curriculum provides students with the opportunity to gain knowledge and skills that will help them to successfully move from Preclerkship to Clerkship. TTC focuses on developing competency in teamwork, managing and applying evidence, quality improvement and patient safety. The course also includes sessions on medical legal aspects of professionalism and public health and population health and gender and cultural diversity. Also included are two full days of instruction in dermatology, involving; viewing a large number of patients with various skin findings; seminars; time to complete online learning modules; plus a written examination. Students also attend mandatory academy sessions which include an orientation to the academy, sessions on professionalism, infection control, crisis intervention and clinical skills training.

In year 3 of Clerkship curriculum, there are two 24-week blocks, one of which includes eight weeks each of Surgery and Medicine, four weeks of Emergency Medicine, two weeks of Anesthesia, and one week each of Ophthalmology and Otolaryngology. The other 24-week block includes six weeks each of Psychiatry, Paediatrics, Obstetrics & Gynecology, and Family & Community Medicine. Each rotation includes substantial time spent learning in the context of providing care to patients, often as part of a multidisciplinary team, in a variety of settings including ambulatory clinics, hospital wards, the emergency department, the operating room, the labour and delivery suite among others. Rotations include a variety of assessments, including clinical performance evaluations, written tests and on several of the rotations, clinical skills assessments via oral or OSCE examinations.

A number of students (22 in 2015-2006) complete a third year clerkship through a different approach and timetable referred to as the Longitudinal Integrated Clerkship (LInC).

During year 3, students participate in the Portfolio course which has been designed to facilitate students' professional development through guided reflection, focused on all their activities in the clinical phase of their journey and how they relate to the six intrinsic CanMEDS roles of Collaborator, Communicator, Leader, Health Advocate, Scholar and Professional. The goal of the course is to promote greater professional self-awareness in each of these roles, as students enter the clinical world. Students attend one large group introductory session and seven mandatory small group meetings throughout the academic year. In the latter, students meet in small groups of up to eight, with one resident (Junior Academy Scholar) and one faculty member (Academy Scholar) to support them in reflecting on their experiences in

the clinical setting, and the resulting effects on their professional development. Students will create portfolio submissions throughout the year for eventual inclusion in the final portfolio.

Students are required to electronically log required patient encounters and procedures during each core Clerkship through MedSIS to guide their learning and satisfy the relevant accreditation standard. Additional information is available on the Portal.

Student assessment includes an integrated OSCE (iOSCE) during year 3. The OSCE stations each consist of a simulated patient encounter during which students may be required to obtain a history, do aspects of a physical examination, interpret diagnostic tests, provide patient counselling, suggest management or provide answers to questions related to the patient encounter. The first iteration, which provides principally formative evaluation, is held during week 24, and the second, which is a summative evaluation, is held during the second last week of year 3. Successful completion of the iOSCE is a requirement for graduation from the MD Program.

At the beginning of year 4, 13 weeks are allocated to elective experiences, where students are provided the opportunity to gain exposure to areas of expertise beyond the scope of the core Clerkship and to further enhance their training in sub-disciplines within the major specialties. According to electives requirements, electives in Clerkship must be organized so that by the time of graduation, each student has had an elective experience in a minimum of three different disciplines, each of which takes place for a minimum of two weeks. Note that a 'discipline' refers to any CaRMS entry-level program.

Transition to Residency consists of the final 12 weeks of year 4. This course allows students to bring together many of the concepts they have learned about functioning as doctors and put them into practice in real world settings, where they get a chance to participate in the 'real' work of physicians, as preparation for postgraduate training. There are two campus weeks which contain classroom-based learning activities about concepts such as understanding chronic care, medical-legal and licensure issues, complementary medicine, fitness to drive, and a number of other topics. The two-week Fusion period brings the students back together for review of clinical material through lectures which help to prepare students for the Medical Council of Canada Part 1 Examination. The Selectives cover eight weeks and promote workplace-based learning, where students have increased (graded) responsibility under supervision, and allow the students to bring together many different areas of knowledge and skill in the care of patients or populations, as they get ready for the increased responsibility of their postgraduate programs. Selectives also serve as a resource for students to complete specific self-directed learning activities for course credit, and also include an evaluation performed by their supervisor(s). Students should experience how the competencies of Communication, Collaboration, Advocacy, Leader,

Professionalism and Scholar all work together in 'real' clinical activity. Finally, students ideally should be able to interact with multiple disciplines (physician specialties, other health care professions) over patient care issues to develop a more holistic understanding of those issues.

Students are required to complete at least four weeks of the Selectives in a community setting, and at least one of the Selectives in either a Medicine or Surgery based area. It is possible that a single Selective can satisfy both requirements. Students may use one of their Selectives to satisfy the CaRMS requirement for three direct-entry electives.

Clinical responsibilities of clerks

It is to be understood that a clinical clerk is an undergraduate medical student and not a physician registered under the Regulated Health Professions Act (RHPA). Clerks will wear name tags, clearly identifying them by name, and as a 'senior medical student', and they must not be addressed or introduced to patients as 'Dr.' to avoid any misrepresentation by patients or hospital staff.

Each student shall be under the supervision of a physician registered under the RHPA who is a member of a medical or resident staff of a hospital or who is a designated preceptor. **Final responsibility for medical acts performed by clinical clerks rests with the clinical teacher or preceptor.**

Recommendations for the scope of activities:

- Documentation of a patient's history, physical examination and diagnosis. This must be reviewed and countersigned by either the attending physician, or another physician registered under the RHPA who is responsible for the care of the patient, if it is to become part of the official record in the patient's chart. Similarly, progress notes must also be countersigned.
- Orders concerning the investigation or treatment of a patient may be written under the supervision or direction of a physician registered under the RHPA. Before these orders can be put into effect, the supervising registered physician must either 1) immediately countersign the order or 2) verbally confirm them with the healthcare personnel (usually nursing staff) responsible for their enactment. All orders must be countersigned within 24 hours.
- Orders for medication or investigations are to be clearly and legibly signed with the signature of the clinical clerk followed by the annotation "cc". Students should make a practice of printing their name below their signature.
- Guided by the principles of graded responsibility, medical students engaged in clinical activities may carry out controlled acts, according to the RHPA, under direct or remote supervision, depending on the student's level of competence. *In the latter case, these acts must be restricted to*

previously agreed upon arrangements with the registered physician who is responsible for the care of the patient.

- A clinical clerk is not permitted to submit prescriptions to a pharmacist unless they are countersigned by a registered physician.

For more information, please visit the College of Physicians & Surgeons of Ontario's Policy on Professional Responsibilities in Undergraduate Medical Education.

http://www.cpso.on.ca/policies-publications/policy/professional-responsibilities-in-undergraduate-med

The Longitudinal Integrated Clerkship (LInC)

Faculty Leads	LInC Coordinator
Dr. Stacey Bernstein Clerkship Director stacey.bernstein@sickkids.ca	Samantha Fortunato samantha.fortunato@utoronto.ca 416-946-5208
Dr. Raed Hawa Deputy Clerkship Director raed.hawa@uhn.ca	

Academy/Site	Site Faculty Lead	Site Coordinator
FitzGerald/ St. Michael's Hospital	Dr. Ra Han hanra@smh.ca	Kate Jackson jacksonkat@smh.ca 416-864-6060 ext. 77451
Peters-Boyd/North York General Hospital	Dr. Clare Hutchinson clare.hutchinson@nygh.on.ca	Ariel Weber ariel.weber@nygh.on.ca 416-756-6000 ext. 4896
Peters-Boyd/Sunnybrook Health Sciences Centre	Dr. Piero Tartaro piero.tartaro@sunnybrook.ca	Norma Armas-Lewis norma.armaslewis@sunnybrook.ca 416-480-5962
Wightman-Berris/	Dr. Adam Kaufman	Joanne Mount

Michael Garron Hospital	adam.kaufman@utoronto.ca	j.mount@utoronto.ca 416-469-6580 ext.6545
Wightman-Berris /Toronto Western Hospital	Dr. Natalie Clavel natalie.clavel@uhn.ca	Brian Davidson brian.davidson@uhn.ca 416-340-4800 ext. 3265

LInC overview

The Longitudinal Integrated Clerkship (LInC) strives to support students in the achievement of the same objectives as the block clerkship program. The LInC curriculum content, preceptors, exams and other assessments will match the block clerkship; however, the implementation model will differ.

The LInC experience is designed to:

- Provide flexible, integrated, longitudinal, patient-centred opportunities for guided deliberate practice in achieving the University of Toronto clerkship goals and objectives across all of the CanMEDS roles.
- Enhance the relationship between the student and preceptor through a mentored apprenticeship to enhance the learning of all of the CanMEDS roles.
- Cultivate curiosity and augment lifelong learning skills by providing enhanced opportunities and structured time for reflection and for self-directed learning with the patient as a guide, in support of the CanMEDS scholar role.
- Help the student to learn how to navigate complex health systems and manage competing clinical priorities by following patients longitudinally through the health care system. This also provides an opportunity for appreciating the experience through the patient's lens and grounding several of the CanMEDS roles: leader, health advocate and collaborator.
- Focus on clinical delivery primarily within a hospital-based ambulatory context, thereby mirroring the environment in which practicing physicians ultimately work and provide care, in support of the CanMEDS leader role. The LInC also accommodates short, relevant inpatient experiences as required by the patient and the student in order to support the development of competencies best learned in a concentrated inpatient context.
- Facilitate learning of enhanced communication skills to better meet communication challenges in the health care system in support of the CanMEDS communicator role.

- Foster students' professional identity formation through longitudinal relationships with patients and preceptors in support of the CanMEDS professional role.
- Foster the development of a humanistic, holistic professional in support of the CanMEDS professional role.
- Have alignment of its objectives, clinical course time and assessment tools with the broader clerkship curriculum, in support of all CanMEDS roles.

In the LInC, students meet the core clinical competencies of year 3 across multiple disciplines simultaneously. Students work longitudinally with a small number of preceptors in each discipline who serve as mentors and provide oversight to their experience. Over the year students will follow a patient panel of 50-75 patients from across all the clerkship rotations, with an emphasis on conditions that involve significant contact with the health care system. The patients on the panel are to represent various developmental milestones in a person's life and to reflect diversity in terms of ethnicity, gender, ability and other attributes.

LInC students will complete three weeks of Transition to Clerkship along with the rest of the class. LInC students will also complete:

- A 2-week introductory experience in family medicine. Subsequently students will be in family medicine clinics one half-day per week allowing longitudinal follow-up of panel patients
- 1 week of LInC preparation ("LInC prep") which provides an orientation to the LInC experience, an introduction to the O.R., as well as all simulations necessary to start the clerkships simultaneously.
- 38 weeks of concurrent ambulatory clinical experiences
- 3 weeks of in-patient general surgery immersion
- 4 weeks of in-patient general internal medicine immersion

LInC students will have 1.5 days per week of flexible, self-directed clinical time ("White Space"). During White Space time students are able to participate in the *clinical* care of their panel of patients and engage in reflective practice. During this time, students may arrange to visit a patient who has been admitted to hospital, follow up on patient results, go on a home visit, accompany their patient to an appointment, participate in the operating room if one of their patients is having surgery, deliver a baby from one of their panel patients, etc.

One half-day per week will be devoted to coverage of various core content areas through the LInC School. Sessions will include topics currently taught during mandatory centralized teaching in the block clerkship

rotations. The core content will be scheduled to cover topics so that students are adequately prepared for their examinations and be exposed to humanities related topics. Students will cover topics in a flexible manner according to questions that arise from their patient panel and other clinical experiences. They will have access to all the recorded seminars that the block students participate in.

Clerkship courses – YEAR 3

Transition course: Transitions to Clerkship (TTC – 3 weeks)

Course Director	Course Administrator
Dr. Tatiana Freire-Lizama freire-lizamat@smh.ca	Susan Rice s.rice@utoronto.ca 416.978.2188

Course Leads for various core sessions

Section	Lead(s)	E-mail
Negotiations	Dante Morra	Dante.morra@trilliumhealthpartners.ca
Complexity & Systems / Physician Supply & Databases for Health Services Planning	Isser Dubinsky	isser.dubinsky@utoronto.ca
Managing Information / Mrs. Singh	Trevor Jamieson	jamiesont@smh.ca
Resource Stewardship	Rory McQuillan	rory.mcquillan@uhn.ca
Patient safety and quality improvement	Geetha Mukerji	geetha.mukerji@wchospital.ca
Therapeutics	Martin Schreiber	schreiberm@smh.ca
Nutrition	Ashley Leone and Martin Schreiber	ashleyleonenutrition@gmail.com schreiberm@smh.ca
Dermatology	Perla Lansang	perlalansang@gmail.com
Medical Imaging	Ben Fine Raymond Lawlor Elsie Nguyen	ben.fine@utoronto.ca raymond.lawlor@mail.utoronto.ca elsie.nguyen@uhn.ca
IPE /Safe Prescribing/Digital Professionalism/ Discharge Summaries	Mark Bonta	mark.bonta@uhn.ca
Outbreak management	Kate Bingham	kate.bingham@utoronto.ca
Poverty & Health	Sharon Gazeley	gazels@hotmail.com

Diversity	Tatiana Freire-Lizama	freirelizamat@smh.ca
Medicolegal / Digital Professionalism	Erika Abner	erika.abner@utoronto.ca

Academy Day Leads

Academy	Academy Director	E-mail
MAM	Pamela Coates	pamela.coates@trilliumhealthpartners.ca
FitzGerald	Molly Zirkle	zirklem@smh.ca
Peters-Boyd	Eugenia Piliotis	eugenia.piliotis@sunnybrook.ca
Wightman-Berris	Jackie James	jacqueline.james@sinaihealthsystem.ca

Course description

There are three major elements to the course:

1. **The TTC Core Curriculum**: This occupies most of the three-week course. Some of the time is spent at the campuses, and some at the academies. This includes large-group and small-group face-to-face learning activities, as well as several required online learning sessions.

2. **The TTC Academy Days**: These take place on each of the three Wednesdays in the course, and also the first Thursday morning. This time is spent entirely at the academies. Although the objectives of these Academy Days are uniform, the specific ways these objectives are addressed will vary between academies.

3. **The Dermatology course**: An independent course embedded within TTC. All details of DER310Y (the dermatology course), including the examination scheduled for Friday, September 9, 2016, are described in the Dermatology syllabus, found on the Portal in the Dermatology shell.

Goals

The Transition to Clerkship (TTC) course strives to assist students in developing the knowledge, skills and attitudes they require to successfully transition from their role as a student in the Preclerkship, to a member of the health care team as a clerk. The course builds on the very substantial learning from the Preclerkship, and provides students with the opportunity to learn in four priority areas:

1. The Intrinsic CanMEDS roles (i.e., those apart from medical expert), with special emphasis on teamwork (Unit 1), patient safety, managing information, resource stewardship (Unit 2), interprofessional care (Unit 4) and medical-legal issues (Unit 6).
2. Medical Expert roles in areas previously identified by clinical clerks as requiring further attention in preparation for clerkship (therapeutics, nutrition, medical imaging, outbreak management) (Unit 3).
3. The care of priority populations (with attention to people living in poverty and various diversity groups (Unit 5).
4. Specific skills needed for clerkship (unit 7 and Academy Days).

Course objectives

At the completion of the Transition to Clerkship course, students will be able to demonstrate the following competencies, categorized under several groups.

Related to the Intrinsic CanMEDS Roles:

- **Teamwork, change management, politics of physician supply & negotiations (Leader role)**
  1. Describe the attributes of high performing teams in health care
  2. Work closely with a new team towards a shared goal
  3. Describe and apply key principles of change management
  4. Contribute to creating a team charter
  5. Present the outcomes of team activities
  6. Reflect on team dynamics
  7. Learn models of managing physician supply and their pros and cons
  8. Learn techniques and styles of negotiation
- **Patient safety (Leader role)**
  1. Appreciate the clinical clerks' role in recognizing and reporting patient safety events
  2. Learn about and apply commonly used patient safety concepts including preventable adverse events, error, adverse event, near miss, and just culture
  3. Describe the importance of taking a systems approach for evaluating patient safety events
  4. Describe principles pertinent to teamwork and communication as they apply to safe delivery of health care
- **Resource stewardship (Leader role)**
  1. Describe the need for resource stewardship in healthcare
  2. Define and give examples of 'low-value' health care
  3. Explain the goals of the Choosing Wisely campaign
  4. Navigate web-based healthcare stewardship guidelines and resources

5. Give examples of why physicians may not always apply principles of resource stewardship
6. Discuss effectively the phenomenon of unnecessary tests and treatments with patients and colleagues

- **Managing information (Scholar role)**
  1. Understand key aspects of high-quality individualized objectives
  2. Create patient-driven personal learning objectives on a daily basis
  3. Understand the contemporary challenges with information retrieval and how these vary by context and purpose
  4. Appreciate the need for personal reflection and improvement of your processes for finding information (indefinitely)
  5. Retrieve information in real-time, and experience how that is different
  6. Use common informational resources including search engines, Wikipedia, and non-peer-reviewed aggregators
  7. Appraise online content using a simple four-factor approach
- **Interprofessional care (Collaborator role)**
  1. Describe the roles and responsibilities of collaborating health care professionals in the clinical environment
  2. Demonstrate a capacity to build and maintain healthy professional relationships with collaborating health care professionals
  3. Demostrate effective, collegial and respectful communication with other members of the healthcare team
- **Medicolegal and digital professionalism issues (Professional Role)**
  1. Describe differences between legal and ethical/professional reasoning
  2. Describe how the law defines professional duties and responsibilities for clinical clerks and physicians
  3. Describe how physicians and lawyers may work together as colleagues
  4. Identify the positive purposes of digital media in medical education and practice
  5. Describe possible negative outcomes of the use of digital media, including loss of reputation, breach of privacy and confidentiality, relationships with patients and others
  6. Explain the shaping nature of their relationships with digital media and maintain the capacity for deliberate, ethical, and accountable practice
  7. Manage social media problems that may occur in Clerkship

Related to the Medical Expert role:

- **Therapeutics**

For acute medical disorders frequently encountered in the in-patient and emergency health care settings, and for common ambulatory care problems:

1. Identify medications available to treat the problem
2. Explain their mechanisms of action
3. Describe the principles relate to choosing among the available agents
4. Describe how to monitor for efficacy
5. Describe side effects of the medications and how to monitor for these

- **Nutrition**
  1. Describe principles of identification and management of common clinical nutritional issues.
  2. Be able to appropriately refer a patient to a registered dietitian.
  3. Reflect on their own nutrition
- **Medical imaging**
  1. Describe safe and effective utilization of imaging studies using best-practice guidelines when investigating patients' symptoms and diseases
  2. Demonstrate an organized approach to interpreting chest X-rays and brain CT scans
  3. Use picture archiving systems in the hospital setting
- **Outbreak management**
  1. Describe the structure and roles of public health units
  2. Describe major principles of the epidemiology of infectious disease, including line listing and the epidemic curve
  3. Describe the main methods used for infectious disease control
  4. Describe the role of physicians in reporting disease to public health authorities
  5. Describe how to assess risk from infectious diseases in the context of an outbreak
- **Dermatology**

  For information about the objectives of the Dermatology course within TTC, please see the separate Dermatology syllabus.

Related to the care of priority populations:

- **Patients living in poverty**
  1. Be able to use the poverty tool and poverty primers to assist patients living in poverty.
  2. Identify how attitudes towards people living in poverty can affect how a physician provides care to his/her patients
  3. Give examples of how individual, community-based or systemic advocacy can minimize the impact of poverty in the community

4. Identify community resources that can assist patients and communities which experience poverty

- **Diversity and cultural competence**
  1. Identify diversity groups in the local population
  2. Appreciate the heterogeneity of patient characteristics within these diversity groups
  3. Describe what assumptions must be avoided in these groups
  4. Describe key questions to ask, strategies to develop affective therapeutic relationships and minimize health disparities
  5. Identify useful resources in order to be able to learn more

Related to One's Role as a Clinical Clerk (Academy Days)

- **Order-writing and discharge planning (Medical Expert, Collaborator)**
  1. Describe the elements of admission orders
  2. Be able to make a reasonable attempt to write the admission orders for a patient with a clinical problem the student has some familiarity with
  3. Explain the role of the multidisciplinary team, especially as it pertains to discharge planning, and therefore consult effectively with them
- **Technical skills (Medical Expert)**
  1. In a simulated exercise, learn and attempt to demonstrate the correct technique for:
     (i) Intravenous line insertion
     (ii) Venipuncture
     (iii) Arterial blood gas puncture
     (iv) Nasogastric tube insertion
     (v) Airway management
     (vi) Recording an electrocardiogram
  2. Demonstrate the correct technique for wearing personal protective devices such as gloves, gown, mask and eye wear
  3. Demonstrate appropriate handling of sharps
- **Managing violent patients (Communicator, Professional, Leader/Manager)**
  1. Demonstrate an understanding of the situations that may trigger a violent reaction in a patient
  2. Describe how they can de-escalate a situation involving an angry patient
  3. Demonstrate the ability to maintain personal and patient safety when dealing with a potentially violent patient
  4. Be aware of resources available to assist in managing a potentially violent patient
- **Professional relationships (Communicator, Professional, Leader/Manager)**

1. Demonstrate medical interviewing skills learned in years 1 and 2
2. Demonstrate skill in managing challenging interpersonal situations when interacting with patients
3. Develop a deeper sense of the therapeutic value of the doctor-patient relationship
4. Maintain appropriate boundaries when dealing with patients
5. Have an understanding of the types of challenging conversations with patients and families they may face in Clerkship

- **General skills (Leader, Professional/Medical Expert)**

1. Have a better understanding of the role of a clinical clerk in the hospital environment and the health care team
2. Describe activation of emergency systems in the hospital and Codes
3. Use hospital electronic patient record systems
4. Apply the principles of infection control
5. Describe the Occupational Health and Safety services available in the hospital
6. Be aware of important hospital policies such as privacy and have completed an e-learning module on privacy

Learning Activities in TTC (brief description)

(For details, see the syllabus for TTC and the materials supplied by each academy for the Academy Days)

1. **Academy Days**

   During the Academy Days, students take part in a variety of small-group generally interactive learning activities.

2. **Charter group work & negotiations: shaping your environment**

   The charter group work will bring together groups of 8-10 students who will be presented with a 'challenge' common to most hospitals and are asked to resolve the issue. The session on shaping your environment will review negotiation 'styles' and provide an overview of how physicians can successfully shape their own environments.

3. **Managing information, resource stewardship, patient safety and quality improvement module**

   a. **Introductory lecture**: On Tuesday, August 23, 2016 the material in this module will be introduced during a large-group lecture.

   b. **Mrs. Singh case:** This is a realistic, virtual case exercise that unfolds over several days, mimicking the evolution of an actual inpatient admission. Students are asked to complete a variety of brief, online exercises focusing on personal learning objectives. This culminates in activities during the seminar on Friday, September 9, 2016.

c. **IHI modules on patient safety**: There are three of these interactive, online modules for students to complete by September 3, 2016.
d. **Managing information and resource stewardship videos**: There are several brief videos for students to watch that describe the various information sources that students can use during their clerkship studies, including a consideration of their strengths and drawbacks (these are listed in Self-Study tasks).
e. **Seminar** (Friday, September 2, 2016): This is a small-group, case-based interactive seminar, that takes place at the academies.

4. **Dermatology course.**

The bulk of the dermatology course in the third year clerkship in 2016-17 will be offered during the TTC course timeframe. *Please refer to the Dermatology (DER310Y) Course Portal for ALL course materials.*

5. **Medical expert topic academy-based seminars**

Interactive, small-group case-based seminars will be held at the academies to cover core aspects of the following topics: *Medical Imaging, Nutrition, Therapeutics*.

6. **Interprofessional education**

a. **IPE shadowing session:** Thursday August 25, students will spend the main part of the morning observing the work of one of the collaborating health professionals at their academy site. The health professional will be from the service on which the student will be working in their first rotation. The students will be provided with a series of recommended questions to guide their experience and are asked to complete a post-activity reflective exercise aimed towards consolidating this experience. This Shadowing Session is an 'IPE in a Clinical Placement' Learning Activity as defined by the Center for IPE.

b. **Safe prescribing**: This session is a uni-professional session that covers themes of interprofessional care and patient safety. The session is comprised of a large-group lecture facilitated by members of the Faculty of Medicine and Pharmacy followed by small-group, interactive case analysis where the students will practice prescription writing under different conditions. Members of the Faculty of Pharmacy will facilitate the small-group session predominantly.

7. **Campus-based core learning**

- **Outbreak management:** There is a large group introduction followed by small group, interactive application exercises.
- **Priority populations:**
    i. *Poverty & Health workshop:* This is a small group session to provide students with background on how to assist patients living in poverty. The sessions are co-led by a physician with expertise in the care of people living in poverty, and by co-tutors who are people who have experienced living in poverty.
    ii. *Diversity*: This is a large group panel discussion led by physicians who themselves belong to various diversity groups, and who are able to provide advice to students on how to optimally interact with patients from these groups.
- **Medicolegal issues:** There is a large group introduction followed by small group, interactive case-based application exercises.
- **Digital Professionalism issues:** There is a large group interactive session where students will work in small groups to analyze typical issues associated with social media.

8. **Preparing for clerkship**
    a. **Capstone videos**: This provides students with orientation to various aspects of Clerkship, including the office of student affairs, the red button, MedSIS, case logs, duty hours policies, documentation, and the portfolio course in Clerkship. It is important that you be familiar with this material; the decision to video these sessions was made so you can periodically refer back to them if needed.
    b. **Dimming the headlights:** Course directors (or a designated faculty representative) from various clerkship rotations will be available, along with residents and clerks who have recently completed the rotation, to answer your questions and provide advice as to how to best prepare and navigate through the rotation.

Assessment

Dermatology (311Y)

Please refer to the Dermatology (DER310Y) section *of the Student Handbook.*

Transition to Clerkship Course (TTC 310Y)

Transition to Clerkship is a Credit/No-Credit course. Determination of the final standing in TTC will be based on three weekly quizzes and Credit/Non-credit assessments. The assessment summary can be found in the course syllabus. The dermatology examination counts towards the final grade in the dermatology

course; it does not count towards the final grade in TTC. The following comments describe individual assessment requirements. The assessments are summarized below.

Charter Group Work Assignment
As part of a team, groups will be presented with a 'challenge' common to most hospitals and will be asked to resolve the issue in a group assignment. Failure for the group to submit the assignment by the deadline can result in 'No credit'.

Interprofessional Education
For students to successfully gain credits required for their IPE standing, attendance is mandatory during the two IPE sessions that are scheduled on August 25 (Academy IPE Shadowing) and September 8 (Interprofessional Safe Prescribing).

Institute for Healthcare Improvement (IHI) Modules:
These are a credit/no-credit assessment.

Quizzes: TTC has weekly portal-based quizzes under the 'Quizzes and Assignments' tab within the TTC course shell. Students can use whatever resources they want in order to complete these quizzes. The schedule of quizzes is available in the *Student Assessment in TTC – Summary* section of the TTC syllabus. Each quiz will be open for the week and can have multiple attempts. Once the quiz has closed for the week, the last completed numerical score will be applied to your final grade. Quizzes will not be re-opened unless otherwise pre-arranged with the Course Director.

Mandatory Attendance: Attendance is mandatory. Attendance will be taken randomly (at both small group campus and academy sessions, as well as large lectures) and any student not present without having made arrangements with the Course Director will be considered for a lapse in professional behavior and may not complete the course since students must attend all activities for credit to be granted for TTC. Students who legitimately need to miss one or more of these sessions must contact the Course Director, Dr. Freire-Lizama (freire-lizamat@smh.ca). All planned and unplanned absences must be requested and reported in accordance with the *Regulations for Student Attendance and Guidelines for Approved Absences from Mandatory Activities (PDF)*

Core Clinical Rotation: Anesthesia (2 weeks)

Course Director	Course Administrator

Clerkship courses – YEAR 3

Dr. Ahtsham Niazi ahtsham.niazi@uhn.ca	Katia Malyuzhinets katia.malyuzhinets@utoronto.ca

Site Directors/Assistants

Site	Director (Faculty)	Assistant
HSC	Dr. Clyde Matava clyde.matava@sickkids.ca	Melissa McKay melissa.mckay@sickkids.ca
MSH	Dr. Mital Joshi mital.joshi@utoronto.ca	Josephine Sham josephine.sham@uhn..ca
NYGH	Dr. Darryl Irwin darryl.irwin@nygh.on.ca	Peggy Sze peggy.sze@nygh.on.ca
SJHC	Dr. Suzanne Lilker slilker@rogers.com	
SMH	Dr. Carol Loffelmann loffelmannc@smh.ca	Anna Salter saltera@smh.ca
SHSC	Dr. Anita Sarmah anita.sarmah@sunnybrook.ca	Eva Delavinias eva.delavinias@sunnybrook.ca
TSH – General	Dr. Larry Panos lpanos300@gmail.com	Anne Davies adavies@tsh.to
TSH – Birchmount	Dr. Alan Tallmeister tallmeister9818@rogers.com	
THP – CVH	Dr. Christopher Flynn christopher.flynn@trilliumhealthpartners.ca	Yvonne McVeigh yvonne.mcveigh@trilliumhealthpartners.ca
THP – MH	Dr. Augustine Rhee augustine.rhee@trilliumhealthpartners.ca	Lorraine Ferraro lferraro@trilliumhealthpartners.ca
Michael Garron Hospital	Dr. Patrick Mark patrick.mark@utoronto.ca Dr. Desmond Lam delam@tegh.on.ca	
TGH	Dr. Diana Tamir diana.tamir@uhn.ca Dr. Marjan Jariani	Eva Bowman eva.bowman@uhn.ca

	marjan.jariani@uhn.ca	
TWH	Dr. Zoe Unger zoe.unger@uhn.ca	Christine Drane christine.drane@uhn.ca
WCH	Dr. Dragan Djordevic dragan7777777777@yahoo.ca	

The Anaesthesia rotation is a two-week course in the eight-week Otolaryngology/Ophthalmology/ Anaesthesia/Emergency Medicine rotation.

Clinical schedule

Students are assigned for each shift to a faculty staff member in the operating room, labour floor, pre-admission clinic, or pain service. They are provided with a "Topics for Discussion" form which serves as a guideline for discussion of core objectives with their faculty member. Students complete a preoperative assessment on all patients assigned, and assist in all aspects of anesthetic care. There are evening shifts but no overnight call.

E-Modules, seminar, and simulation

The Anesthesia course is based on a 'flipped classroom' model. Students are required to complete seven e-modules during the two- week rotation. Faculty are available via a discussion board for students with questions around module content. There are no seminars during the rotation.

The rotation includes two days at the Simulation Centre at Sunnybrook Health Sciences Centre for all students. Training on the first day includes IV skills, airway management and fluid responsiveness using ultrasound, and case scenarios using simulation to learn ACLS protocols, communication, and collaboration skills during critical events in a simulated operating room.

The second simulation day occurs on the second last day of the rotation. During the exit simulation, the students will rotate through preoperative, intraoperative and postoperative scenarios that reinforce the content in the e-modules. In the afternoon, students will work through integrated cases that highlight module content.

Assessment

- Written examination (60%)
- Clinical performance evaluation (assessment of the student's clinical work during the rotation (40%)
- Professionalism evaluation (Credit/No Credit)

- Case Log requirements (Credit/No Credit)

Students are required to pass both numerical components for a passing grade.

For details, including grading regulations, see the course website on the U of T portal (http://portal.utoronto.ca – registered users only), and the program policies related to examination and assessment (http://md.utoronto.ca/policies).

NB: In order to receive credit for Anesthesia, students must also complete the required evaluations of teachers and of the course, as specified in the course outline, in conformity with the *Principles and Expectations for Student Completion of Teacher and Course Evaluations in UME*.

Course objectives

Upon completion of the Anesthesia Clerkship Rotation, third year medical students will understand the implications of pre-existing disease for patients undergoing anesthesia. They will demonstrate competency in basic airway management and acute resuscitation, and will be able to discuss acute pain management in the perioperative period.

A. General competencies

The third-year medical student will be able to:

Medical Expert

- Demonstrate the ability to assess a patient in the preoperative period and formulate a basic management plan
- Demonstrate the ability to take a focused history and physical examination, including anesthetic history and airway exam
- Develop a plan for preoperative investigations and interpret these investigations
- Understand and explain the risks and benefits associated with regional versus general anesthesia
- Develop an approach to acute resuscitation including appropriate fluid therapy
- Develop an approach to perioperative pain management
- Demonstrate competency in airway management and other procedural skills relevant to the perioperative period

Communicator

- Communicate effectively and empathetically with patients and their families, and recognize their high level of anxiety.
- Communicate their level of training and involvement in the patients care

- Communicate risk with high risk patients and their families.
- Communicate effectively with the perioperative team noting anesthetic related concerns
- Present the preoperative assessment in a clear, concise and complete format in a timely manner

Collaborator

- Establish and maintain effective working relationships with colleagues and health care professionals.
- Consult effectively with physicians and other health care professionals
- Participate effectively on health care teams, namely the Anesthesia Care Team (ACT), Acute Pain Service (APS) and Cardiac Arrest and/or Trauma Teams
- Understand the high level of collaboration (anesthesia, surgery, nursing, pharmacy, anesthesia assistants, and respiratory therapists) required for the effective management of the patient in the perioperative period

Leader

- Demonstrate appropriate and cost-effective use of investigations in an evidence based manner.
- Understand the prioritization of the surgical emergency patient to minimize risk of negative outcome.
- Develop an understanding of the factors contributing to resource issues in the perioperative period.
- Understand the role of physicians in developing the health care system and promoting access to care. (Anesthesia Care Team)

Health Advocate

- Understand the risk factors that lead to increased perioperative risk and how anesthesiologists can assist in modifying these risks in the perioperative period: Smoking cessation, Weight loss, Alcohol use, Recreational drug use

Scholar

- Retrieve information from appropriate sources related to the anesthesia curriculum.
- Assess the quality of information found, using principles of critical appraisal
- Develop an approach to self-directed learning

Professional

- Interact with patients in a compassionate, empathetic and altruistic manner.
- Recognize his or her limitations and seek appropriate help when necessary.
- Maintain patient confidentiality.
- Understand the current legal and ethical aspects of consent for surgery, anesthesia, and blood transfusion.
- Understand full and honest disclosure of error or adverse events

- Understand initiatives, such as the 'Operating Room Checklist' which have been undertaken to ensure patient safety and to minimize medical error in the perioperative period
- Fulfill all obligations undertaken, including educational obligations.

B. Educational core objectives

I. Skills

At the completion of the Anesthesia Clerkship rotation, the third year medical student should be able to demonstrate basic proficiency in the following skills. These skills may be acquired during the clinical rotation, seminars or simulation day.

- **Technical Skills**

  One of each must be attempted or completed:

  1. Airway insertion
  2. Cardiac monitor lead placement
  3. Endotrachael intubation
  4. Laryngeal mask insertion
  5. Mask ventilation
  6. Peripheral IV insertion
  7. Video laryngoscopy

- **Interpretive Skills**

  One of each must be completed:

  1. Capnography
  2. Cardiac Monitor
  3. Pulse Oximetry
  4. Airway assessment

II. Problem-based

Upon completion of the Anesthesia Clerkship rotation, the third year medical student should be able to demonstrate an approach, including differential diagnosis and management, for the following patient encounters. These may be based on either real or simulated encounters.

Required:

One encounter of each is required:

1. Hypotension/Shock (Observe and manage with faculty or resident)
2. Hypoxia/Apnea (Observe and manage with faculty or resident)
3. Pain Management (Observe and discuss management with faculty)
4. Preoperative Assessment (Complete independently and discuss with faculty)

Textbooks/learning resources

Students are provided with an anesthesia course manual that contains the core objectives. Chapters in the manual are authored by our faculty.

Other suggested textbooks are the following. They are not required for this course.

1. Ottawa Anesthesia Primer, Dr. Patrick Sullivan; Echo Book Publishing 2012
2. Understanding Anesthesia: A Learner's Guide, Dr. Karen Raymer
   (free download at www.understandinganesthesiology.com/)

Core Clinical Rotation: Dermatology

Course Director	Course Administrator
Dr. Perla Lansang perlalansang@gmail.com	Lucy Kudelkina lucy.kudelkina@sunnybrook.ca 416-480-6100 ext. 4995

Course overview

The Dermatology course consists of four elements:

1. Patient viewing
2. Online modules
3. Written dermatological clinical history and physical exam note
4. Written exam

The course is held within the Transition to Clerkship course (TTC). By the end of TTC, the clerks are expected to have attended the patient viewing day, completed the online modules, and to have submitted their dermatology clinical note to the course coordinator for marking. The course concludes with a written exam.

In addition to the aforementioned course work, course materials in the form of a syllabus and online atlas are provided to students, covering all the topics that they are expected to learn during their Dermatology course. The entire course content is posted on Blackboard.

Assessment

- Attendance of patient viewing (Credit/No Credit)

- Completion of online modules (Credit/No Credit)
- Final written examination (80% of mark)
- Professionalism evaluation (Credit/No Credit)
- Written dermatologic history and physical exam note (20% of mark)

The student must achieve an overall passing mark (60% or higher) to receive credit for the course. The minimum expected mark for each component is 60%.

For details, including grading regulations, see the course website on the U of T portal (http://portal.utoronto.ca – registered users only), and the program policies related to examination and assessment (http://md.utoronto.ca/policies).

NB: In order to receive credit for Dermatology, students must also complete the required evaluations of teachers and of the course, as specified in the course outline, in conformity with the *Principles and Expectations for Student Completion of Teacher and Course Evaluations in UME*.

Course objectives

At the conclusion of Clerkship in Dermatology, the student will be able to:

Medical Expert

- Obtain and document a complete and focused dermatological history
- Perform a complete and focused dermatological physical examination
- Accurately apply dermatological terms to normal and abnormal features on physical exam
- Identify and demonstrate normal and abnormal features on general skin exam
- Recognize dermatological manifestations of internal disease
- Recognize common dermatological disorders
- Demonstrate an understanding of basic pathophysiology and treatment of common skin conditions
- Formulate a basic practical approach to the investigation of dermatological conditions

Communicator

- Communicate effectively with patients and family through verbal, and non-verbal means of communication
- Demonstrate the importance of cooperation and communication among health professionals

Collaborator

- Recognize the importance of collaboration with other health care professionals in achieving optimal dermatological patient care

- Describe the roles and expertise of all interdisciplinary team members that are required to achieve optimal dermatological patient care

Leader

- Demonstrate an understanding of the appropriate use of health care resources in the dermatological context.

Health Advocate

- Describe the determinants of health and principles of disease prevention and behaviour change pertinent to dermatological disease, including but not limited to skin cancer and occupational skin disease

Scholar

- Demonstrate the ability to engage in self-directed learning and critical inquiry
- Assist in teaching others and facilitating learning where appropriate

Professional

- Recognize and accept the need for self-care and personal development as necessary to fulfilling one's professional obligations and leadership role
- Demonstrate altruism, honesty and integrity and respect in all interactions with patients, families, colleagues, and others with whom physicians must interact in their professional lives
- Demonstrate compassionate treatment of patients and respect for their privacy and dignity and beliefs.
- Be reliable and responsible in fulfilling obligations
- Recognize and accept the limitations in his/her knowledge and clinical skills
- Abide by the University/Faculty codes of professional conduct

Core Clinical Rotation: Emergency Medicine (4 weeks)

Course Director	Course Administrator
Dr. Laura Hans hansl@smh.ca	Nancy Medeiros em.undergrad@utoronto.ca 416-586-5058

Site Directors/Assistants

Site	Director (Faculty)	Assistant
CVH	Dr. Mike Cohen	Sanah Khokhar

	mike.cohen@utoronto.ca	sanah.Khokhar@trilliumhealthpartners.ca
MSH	Dr. Yasmine Mawji ymawji@mtsinai.on.ca	Nancy Medeiros nancy.medeiros@utoronto.ca
NYGH	Dr. Meeta Patel meetapatel.md@gmail.com	Kerry McPartland kerry.mcpartland@nygh.on.ca
SJHC	Dr. Ed Pilon pilon.ed@gmail.com	
SMH	Dr. Laura Hans hansl@smh.ca	Lina Lorzano emergadmin@smh.toronto.on.ca
SHSC	Dr. Mark Freedman mark.freedman@utoronto.ca	Paola Tiveron paola.tiveron@sunnybrook.ca
TSH	Dr. Caroline Thomspon cjnthompson@gmail.com	Anne Davies adavies@tsh.to
Michael Garron Hospital	Dr. George Porfiris gporfiris@rogers.com	Vivian Bryan vbrya@tegh.on.ca
TGH	Dr. Peter Switakowski pswitakowski@rogers.com	Julie Johnston julie.johnston@uhn.ca
THP	Dr. Sarah McClennan sarah.mcclennan@gmail.com	Sanah Khokhar sanah.khokhar@trilliumhealthpartners.ca

Course overview

The Emergency Medicine clerkship is a four-week core rotation. It commences with a seminar series covering material integral to the rotation and continues with clinical shifts at one of the ten Emergency Departments in the Greater Toronto Area. Students complete 14 shifts, including up to two weekends and three overnight shifts.

At the start of the rotation students participate in three days of hands-on workshops and seminars utilizing simulation, skills-based teaching, and case-based interactive sessions. These sessions provide opportunities to acquire essential knowledge and skills in preparation for their clinical experience, and cover topics that include medical imaging, airway management, cardiac dysrhythmias, trauma, ultrasound, toxicology, chest pain, wound management, and splinting.

During the clinical experience in the Emergency Department, clerks function as members of an interprofessional team. They are assigned one or two preceptors with whom at least half their shifts occur. Students learn to manage many types of patient problems that present to the Emergency Department, including exposure to core emergency medicine cases as outlined in the Case Log list. This list can be found on the Emergency Medicine portal. During the rotation there is an opportunity for an observed patient encounter completed with an Attending Physician. In addition, each clerk will spend half a shift with members of the interprofessional team. There will be an additional opportunity to perform basic procedures (intravenous insertion, venipuncture, foley catheter insertion, NG insertion, ECG) and observe the triage process.

In order to ensure that course objectives are met, preceptors meet with clerks at the mid-rotation period to provide formative feedback and review Case Log lists. This provides opportunity for discussion of goals for the latter half of the rotation. At the end of the rotation, the preceptor and clerk meet to complete the formal clinical evaluation. This evaluation is based on shift evaluation cards filled in at the end of each clinical shift. The rotation is concluded by a written final examination.

Assessment

- Written examination (50%)
- Clinical performance evaluation, based on an assessment of the student's clinical work during the rotation (50%)
- Professionalism evaluation (Credit/No Credit)
- Case Log requirements (Credit/No Credit)
- Observed history and physical examination (Credit/No Credit)

To successfully complete the Emergency Medicine rotation, students must pass the written examination as well as the clinical performance evaluation. A mark of 60% is deemed a pass on the exam, with a borderline performance including but not limited to a mark less than 70% on the exam or on the clinical performance, as well as lapses in professionalism. Further details on assessment may be found on the Emergency Medicine shell of the portal.

For details, including grading regulations, see the course website on the U of T portal (http://portal.utoronto.ca – registered users only), and the program policies related to examination and assessment (http://www.md.utoronto.ca/policies).

Clerkship courses – YEAR 3

NB: In order to receive credit for Emergency Medicine, students must also complete the required evaluations of teachers and of the course, as specified in the course outline, in conformity with the *Principles and Expectations for Student Completion of Teacher and Course Evaluations in UME (PDF)*.

Course objectives

By the end of Emergency Medicine Clerkship, the clinical clerk will demonstrate the foundation of knowledge, skills and attitudes necessary for the practice of Emergency Medicine.

A. GENERAL COMPETENCIES

The clinical clerk will be able to:

Medical Expert

- Demonstrate the ability to initially assess and manage common problems presenting to the Emergency Department (ED) (see B.II below)
- Demonstrate the ability to distinguish seriously ill or injured patients from those with minor conditions.
- Demonstrate a focused history and physical examination.
- Develop a working differential diagnosis and management plan.
- Develop plans for investigations and interpret these investigations.
- Understand and explain the risks and benefits of investigations and treatments.
- Demonstrate competency in basic procedural skills relevant to the ED (see B.I below)
- Demonstrate skills in time management.

Communicator

- Communicate effectively and empathetically with patients and their families.
- Demonstrate thorough and clear documentation and charting, with concise recording of pertinent positive and negative findings.
- Demonstrate the ability to council and educate patients and families in the ED.
- Provide clear discharge instructions for patients and ensure appropriate follow-up care.
- Demonstrate the ability to present a patient case in a clear, concise and complete manner.

Collaborator

- Establish and maintain effective working relationships with colleagues and other health care professionals.
- Demonstrate an understanding of the concept of triage and prioritization of care in management of multiple patients simultaneously.
- Discuss the roles of the various providers of prehospital care and the role of the Emergency Physician in prehospital care.

- Demonstrate knowledge of community resources available to the ED.
- Respect the role of the patient's primary care physician by soliciting input in the assessment, in the development of the care plan, and in follow-up.

Leader

- Demonstrate appropriate and cost-effective use of investigations and treatments.
- Develop organizational skills and efficiency in managing patients and maintaining patient flow.
- Develop an understanding of the factors contributing to resource issues in the ED.

Health Advocate

- Demonstrate an awareness of the underlying psychosocial and socioeconomic problems that may precipitate an ED visit.
- Discuss the role of the ED in the health care system and how it relates to other hospital and community health services.
- Demonstrate an understanding of legal and ethical issues surrounding emergency care.
- Identify opportunities for primary prevention in the ED and council patients accordingly.

Scholar

- Access and critically appraise the literature relevant to ED care.
- Understand the many unique learning and teaching opportunities available in Emergency Medicine.

Professional

- Attend scheduled and assigned teaching and clinical responsibilities in a timely fashion.
- Communicate with educational administrators and clinicians when not able to attend scheduled assignments in a timely fashion.
- Recognize and accept his or her limitations and know when to ask for help.
- Protect information provided by or about patients, keeping it confidential, and divulge it only with the patient's permission except when otherwise required by law.
- Be reliable and responsible when fulfilling obligations.
- Recognize situations where common medical errors may occur in the ED.
- Be respectful of the interprofessional team environment in the ED.

B. EDUCATIONAL CORE OBJECTIVES

I. Skills

By the end of the EM Clerkship rotation, the student should be able to demonstrate basic proficiency in the following skills. Competencies to complete these skills may be acquired during clinical shifts, seminars, workshops or on other rotations.

- **Technical Skills:**
  1. airway assessment/management
  2. Casting/splinting
  3. wound care (including local anesthetic, simple suturing, dressing)
- **Interpretive Skills:**
  1. cardiac monitor (rhythm interpretation)
  2. electrocardiograms (MI & rhythm)
  3. plain radiographs (extremity, chest)

II. PROBLEM-BASED

By the end of the EM Clerkship rotation, the student should be able to demonstrate an approach to patients presenting to the Emergency Department (based on real or simulated encounters) with the following problems (including differential diagnosis, investigations, and initial treatments):

1. Abdominal pain
2. Altered level of consciousness
3. Anaphylaxis/severe allergic reaction
4. Arrhythmia
5. Chest pain
6. First trimester bleeding
7. Fracture/Sprain
8. Headache
9. Hypotension/Shock
10. Overdose/Toxicology
11. Seizure
12. Shortness of Breath
13. Trauma

Core Clinical Rotation: Family & Community Medicine (6 weeks)

Course Director	Course Administrator
Dr. Azi Moaveni a.moaveni@utoronto.ca	Cheryl O'Donoghue dfcm.clerkship@utoronto.ca 416-978-1896

Site Directors/Assistants

Site	Director (Faculty)	Assistant

Clerkship courses – YEAR 3

Site	Director (Faculty)	Assistant
MKH (Markham)	Stephen Marisette smarisette@msh.on.ca Dr. Gina Yip gyip@msh.on.ca	Bernice Baumgart bbaumgart@msh.on.ca
MSH	Dr. Elaine Cheng echengsinai@gmail.com	Ron On ron.on@sinaihealthsystem.ca
NYGH	Dr. Jordana Sacks jordana.sacks@gmail.com Dr. Sharonie Valin sharonie.valin@utoronto.ca (on leave)	Mirka Skoubouris mirka.skoubouris@nygh.on.ca
SJHC	Dr. Natascha Crispino ncrispino@stjoestoronto.ca Dr. Sofia Khan skhan3@stjoestoronto.ca	Helen Flynn hflynn@stjoestoronto.ca
SMH	Dr. James Owen owenj@smh.ca	Ed Ang ange@smh.ca Gilda Barillas barillasg@smh.ca
SHSC	Dr. Sherylan Young sherylan.young@sunnybrook.ca	Erin Tigchelaar erin.tigchelaar@sunnybrook.ca
TSH	Dr. Dave Wheler dave.wheler@rogers.com	Stacey Milley smilley@tsh.to
Michael Garron Hospital	Dr. Lisa Ilk lisa.ilk@utoronto.ca Dr. Catherine Yu Catherine.yu@utoronto.ca	

Clerkship courses – YEAR 3

Site	Director (Faculty)	Assistant
TWH	Dr. Andrew Sparrow andrew.sparrow@utoronto.ca Dr. Sarah Fleming sarah.fleming@uhn.ca	Lydia Lamberti lydia.lamberti@uhn.ca
THP-MH	Dr. Ruby Alvi ruby.alvi@utoronto.ca Dr. Jennifer Everson jennifer.everson@trilliumhealthpartners.ca	Sue Todd sue.todd@trilliumhealthpartners.ca
THP-CVH	Dr. Kimberley Kent kimberley.kent@trilliumhealthpartners.ca	Suzanne Serre-Hall suzanne.serre-hall@trilliumhealthpartners.ca
WCH	Dr. Dara Maker dara.maker@utoronto.ca	Sheri Johnston sheri.johnston@wchospital.ca
SOUTHLAKE	Dr. Robert Doherty robert.doherty@one-mail.on.ca	Rhonda Taylor rtaylor@southlakeregional.org
ROMP COLLING-WOOD	Dr. Leslie-Anne Hutchings la_hutchings@hotmail.com	The ROMP Team learners@romponline.com
ROMP BARRIE/ RURAL LIAISON	Dr. Christine Stewart stewart.camem@gmail.com	Carolyn Brooks brooksC@rvh.on.ca
ROMP MIDLAND	Dr. Jeff Golisky jeff.golisky@utoronto.ca	Kim Stewart stewartk@gbgh.on.ca
ROMP ORILLIA	Dr. Steve DePiero stevedepiero@rogers.com	

Clerkship courses – YEAR 3

Course overview

Students will experience family medicine at a Family Medicine Teaching Unit or a community Family Physician's office or a combination of both teaching environments. The 6-week rotation will expose students to various Comprehensive Care Models and we will strive to have students learn in an interprofessional environment.

The initial week of the Family Medicine rotation includes centrally delivered core seminars which will be attended by students from all sites (including the Rural Ontario Medical Program) for the first two days. Core seminars include: Orientation, Family Violence, Motivational Interviewing, Global Health, Palliative Care and Geriatrics. After core seminars, the students will then go to their respective sites to start the clinical portion of the rotation. Students will also participate in site-based seminars, and complete e-modules. These are also mandatory.

Clinical elective half days may also be available depending on the site and may include family medicine obstetrics, home visits, inpatient (hospitalist) care, diabetes care and others.

Assessment

Formative feedback is provided to the clerk on a daily basis by the supervising physician. In addition, a mid-rotation evaluation is completed by the clerk's preceptor.

- **Clinical Evaluation 40%**
  A consensus evaluation of contributing preceptors. An overall grade of 60% is required to pass the clinical evaluation.
- **Project 12%**
  Students will be given the choice to complete an Academic or an Advocacy Project.
  - Academic Project: Marks are awarded with an 80/20 weighting for a 10-15 minute presentation and a 250 word abstract. Students must achieve 60% on the academic project to pass this component.
  - Advocacy Project: Marks are awarded with an 80/20 weighting for a 10-15 minute presentation and a 250-500 word reflective piece.
- **Clinical Evaluation Exercises (FM-CEX) 16%**
  Include at least 4 FM-CEXs completed by a preceptor in weeks 2, 3, 4 and 5 of the rotation. Students must achieve an overall grade of 65% to pass this component of the evaluation.
- **Written Examination 32%**
  Includes short answer and 'key features' examination questions. An overall grade of 60% is required to pass the written examination.
- **Professionalism evaluation (Credit/No Credit)**
- **Case Log requirements (Credit/No Credit)**

For grading regulations, please see the course website on the U of T portal (http://portal.utoronto.ca – registered users only), and the program policies related to examination and assessment (http://www.md.utoronto.ca/policies).

Students must pass all of the above components in order to pass the course.

NB: In order to receive credit for Family & Community Medicine, students must also complete the required evaluations of teachers and of the course, as specified in the course outline, in conformity with the *Principles and Expectations for Student Completion of Teacher and Course Evaluations in UME (PDF)*.

Course objectives

Objectives of the Family Medicine Clerkship are based on the CanMEDS competencies (organized with CanMEDS-FMU framework*).

A medical student completing Family Medicine Clerkship will be able to:

Medical Expert

- Describe the key elements of an effective doctor-patient relationship
- Demonstrate patient-centred medicine (including exploring the illness experience and social context, and shared decision-making to reach common ground)
- Meet the objectives for each of the clinical topics listed below and on the Hub; the seminars (e-module and classroom based); and the topic objectives listed below
- Identify management priorities for patient with multiple morbidities

Communicator

- Share information with patients in a clear manner (e.g. pathophysiology and treatment options)
- Write clear and accurate prescriptions for patients
- Write clear and accurate requisitions for investigations to work-up patients.
- Document patient encounters in a SOAP format
- Present cases effectively

Collaborator

- Describe the roles of consultant physicians and other health professionals for a given patient, including the indications for referral
- Write clear and effective requests for consultations

Leader

- Seek and synthesize additional patient information (e.g. lab results, old charts, consult reports, pharmacy
- records, family member, etc.) when indicated
- Propose initial patient-centred management plans, including follow-up and use of any community resources
- Protect personal health and safety in family medicine settings

Scholar

- Conduct focused literature searches around clinical questions that arise from patient care
- Evaluate the quality and relevance of scientific literature to specific patient scenarios
- Develop and implement a basic self-directed learning plan when a personal learning need is identified

Health Advocate

- Identify issues (social, economic, and resource) for patients and communities that may adversely affect health and access to health care
- Propose approaches to resolving identified issues, including the engagement of community resources where appropriate

Professional

- Reflect on specific aspects of professional behaviour with regards to how well they performed and how they could do better

* **CanMEDS-FMU: Undergraduate Competencies from a Family Medicine Perspective**. College of Family Physicians of Canada. 2009. Accessible at www.cfpc.ca.

B. EDUCATIONAL CLINICAL EXPERIENCES:

I. Technical Skills

By the end of the Family & Community Medicine Clerkship rotation, the student should be able to demonstrate basic proficiency in at least the following skills. Competencies to complete these skills may be acquired during clinical hours, seminars, or on other rotations.

1. Pap Smear
2. Throat Swab
3. Pediatric Vaccination

II. Problem Based Skills

By the end of the Family & Community Medicine Clerkship rotation, the student should be able to demonstrate an approach to patients presenting to the Family Physician's Office (based on real or

simulated encounters) with the following problems: (Including differential diagnosis, investigations and initial treatments)

1. Abdominal pain
2. Anxiety
3. Asthma
4. Chest Pain
5. Contraceptive Methods
6. Cough/Dyspnea
7. Depression
8. Diabetes Type II
9. Dizziness
10. Fatigue
11. Fever
12. Headache
13. Hypertension
14. Coronary Artery Disease
15. Low Back Pain
16. Palliative Care
17. Prenatal Care
18. Periodic Health Exam (Female)
19. Periodic Health Exam (Male)
20. Well Baby/Child

The online clinical/study guide for this course is available at: The Hub - Family Medicine
http://thehub.utoronto.ca/family/

Core Clinical Rotation: Medicine (8 weeks)

Course Director	Course Administrator
Dr. Danny Panisko danny.panisko@uhn.ca	Sumitra Robertson med.undergrad@utoronto.ca 416-978-6766

Site Directors/Assistants

Site	Director (Faculty)	Assistant

MSH	Dr. Luke Devine ldevine@mtsinai.on.ca Dr. Zareen Ahmad zahmad@mtsinai.on.ca	Vivien Jordan vjordan2@mtsinai.on.ca
NYGH LInC	Dr. Danny Robson dannygrobson@gmail.com	Ariel Weber ariel.webber@nygh.on.ca
Michael Garron Hospital	Dr. Janine McCready hmccr@tegh.on.ca	Joanne Mount j.mount@utoronto.ca
TGH	Dr. Katina Tzanetos katina.tzanetos@uhn.ca	Daisy Troiano daisy.troiano@uhn.ca
TWH	Dr. Caroline Chessex caroline.chessex@uhn.ca Dr. Shail Rawal shail.rawal@uhn.ca LInC Dr. Danny Panisko danny.panisko@uhn.ca	Natasha Campbell natasha.campbell@unh.ca LInC Brian Davidson brian.davidson@uhn.ca
SHSC	Dr. Gregory Choy gregory.choy@sunnybrook.ca Dr. Graham Slaughter graham.slaughter@sunnybrook.ca LInC Dr. Piero Tartaro piero.tartaro@sunnybrook.ca	Sally Ganesh sally.ganesh@sunnybrook.ca LInC Norma Arma Lewis norma.armalewis@sunnybrook.ca
WCH	Dr. Savannah Cardew savannah.cardew@wchospital.ca	Vaughn Gillson vaughn.gillson@wchospital.ca
SMH	Dr. Vera Dounaevskaia	Betty-Ann Lemieux

	vera.dounaevskaia@smh.ca SMH and LInC Dr. Reena Pattini pattinir@smh.ca	lemieuxb@smh.ca
THP – CVH	Dr. Katherine Monkman katherine.monkman@trilliumhealthpartners.ca	Keith Leung keith.leung@trilliumhealthpartners.ca
THP – MH	Dr. Sumontra Chakrabarti sumontra.chakrabarti@trilliumhealthpartners.ca	Keith Leung keith.leung@trilliumhealthpartners.ca

Course overview

The Medicine clerkship is eight weeks in duration, and each clerk is assigned to a single Internal Medicine Team for the entire rotation. A sub-group of students may choose a two-week ambulatory care experience in the current academic year. The course begins in the first week with a seminar series over two and a half days.

Over the entire length of the course, there is a graduated experience with increasing responsibility as the rotation progresses. Students have the opportunity to perform the admitting history and physical examinations on patients who present to the Emergency Room, and are asked to provide a provisional diagnosis and differential diagnosis, and to construct an investigation and management plan. They also provide direct patient care for their assigned patients under supervision. Later in the rotation, students carry more patients (up to six per student) and have enhanced responsibilities for patients while on call. Support is provided by other members of the team, including the attending physician and supervising residents. Different sites offer different models for experiences in ambulatory care: students may be assigned from six half-days up to one week in ambulatory clinics so that they have an opportunity to learn about how care is delivered to medical patients in this setting.

Structured Teaching Sessions

1. Morning Report – frequency and time slots vary by site
2. Bedside Physical Examination Sessions – weekly
3. An interactive and case-based medical seminar series taking place in Week 1, and a second series of medical seminars occurring approximately once a week in Weeks 2 through 7.
4. Medical Grand Rounds – weekly
5. Each student is assigned a Faculty Preceptor or Coach who meets with the year 3 medical student and observes the student do a practice patient history and physical examination.

6. Different sites offer different models for experiences in ambulatory care: students may be assigned from six half-days up to one week in

Assessment

Measure	Timing (varies for LInC students)	Portion of Mark	Standard Necessary
Observed Practice History & Physical	By end of Week 3	Credit/No Credit	Completion
Written Examination	Week 6	30%	60%
Structure Clinical Oral Examination	Week 8	25%	60%
Self-Directed EBM Learning Project	Week 7	5%	
Ward Evaluation	Weeks 1-8	30%	60%
Ambulatory Clinics	Weeks 2-7	10%	
Professionalism Evaluation	Weeks 1-8	Credit/No Credit	
Case Log Requirements	Weeks 1-8	Credit/No Credit	Completion

Students must score over 60% on each of the Clinical Ward Performance, Written Examination, and Structured Clinical Oral Examination in order to achieve a grade of Credit for the rotation. Marks between 60 and 70% are considered borderline in these components and may require completion of extra work. Also, students must achieve an overall mark of 60% in the rotation to achieve a grade of Credit for the rotation, together with Credit on professionalism, Case Log requirements and the observed practice history & physical.

For more details, see the course website on the U of T portal (http://portal.utoronto.ca – registered users only), and the program policies related to examination and assessment (http://www.md.utoronto.ca/policies).

NB: In order to receive credit for Medicine, students must also complete the required evaluations of teachers and of the course, as specified in the course outline, in conformity with the *Principles and Expectations for Student Completion of Teacher and Course Evaluations in UME.*

Course objectives

Clerkship courses – YEAR 3

A. General competencies

At the conclusion of the Clerkship in Internal Medicine, the medical student will be able to:

Medical Expert

Demonstrate knowledge of the scientific and humanistic foundations of medicine

- Demonstrate a thorough knowledge of internal medicine. This has three dimensions:
  - a) Relevant aspects of common and life-threatening illnesses affecting adults in terms of:
    - i. Definition
    - ii. Epidemiology
    - iii. Etiology
    - Biological, psychological, social, economic, legal, ethical, and cultural
    - iv. Pathogenesis and pathophysiology
    - v. Clinical features
    - vi. Complications
    - vii. Investigations required to confirm a diagnosis
    - viii. Principles of prevention
    - ix. Principles of management
    - Medical, Surgical, Involvement of allied health professionals, Nutritional
    - x. Prognosis
  - b) An approach to the diagnosis of the major presenting problems encountered in internal medicine. In order to do this, the student needs to be able to:
    - i. List in an organized fashion the major causes of each of these problems
    - ii. List the most important or life-threatening causes of each problem
    - iii. Explain how data that may be obtained from the history and physical examination will affect the likelihood of these diagnostic possibilities for each problem
    - iv. Understand the appropriate use and interpretation of diagnostic tests (see below)
  - c) The properties of medical therapies, in terms of their indications, contraindications, mechanisms of action, side effects, and monitoring
- Demonstrate clinical skills:
  - a) Students should be able to obtain and document both a complete and a focused medical history, as the situation requires
  - b) Students should be able to perform and document both a complete and a focused physical examination, as the situation requires. In order to do this, students must be able to demonstrate:
    - An understanding of the physiologic basis of clinical findings

- A logical, comprehensive, organized approach to the physical examination that is adaptable to specific circumstances
- Proper techniques of physical examination
- Appropriate attention to patient comfort, hygiene, and privacy
- Understanding of the significance of, and ability to detect presence of, the most important physical examination abnormalities pertinent to internal medicine

c) Students should be able to interpret commonly-employed diagnostic tests, knowing their indications, contraindications, risks, and in general terms their test characteristics (sensitivity and specificity)

d) Students should be able to integrate the above history, physical findings, and diagnostic test results into a meaningful diagnostic formulation by:

- Generating a problem list
- Generating a differential diagnosis for each of the problems, and suggesting a tentative or provisional diagnosis

e) Students should be able to demonstrate therapeutic and management skills. In order to do this, the student needs to be able to:

- Suggest appropriate additional investigations for each problem
- Propose a management strategy for each of the problems based on a knowledge of efficacy, risk, and cost. By the end of the Clerkship, students should be able to write admitting orders for each of the common diagnoses encountered in internal medicine.

f) Students should be able to demonstrate the technical skills necessary to perform several of the common procedures used in internal medicine, as well as show that they understand the indications, risks, and benefits of these procedures

g) Make use of evidence-based medicine so that they can better diagnose and manage patient problems

Communicator

- Communicate effectively with patients, their families, and the community through verbal, written, and other non-verbal means of communication
- Establish professional relationships with patients, their families (when appropriate), and community that are characterized by understanding, trust, respect, empathy, and confidentiality
- Deliver information to the patient and family (as appropriate) in such a way that it is easily understood, encourages discussion, and promotes the patient's participation in decision-making
- Gather information, negotiate a common agenda, and develop and interpret a treatment plan, while considering the influence of factors such as the patient's age, gender, ethnicity, cultural and spiritual values, socioeconomic background, medical conditions, and communication challenges

- Present a case summary orally in a clear, logical, and focused manner
- Document in writing all aspects of the patient encounter in the patient chart

Collaborator

- Describe the roles and expertise of all members of the interdisciplinary team that are involved in the care of patients with an internal medicine problem
- Develop a care plan for a patient he/she has assessed, including investigation, treatment, and continuing care, in collaboration with the members of the interdisciplinary team
- Participate in interdisciplinary team discussions, demonstrating the ability to accept, consider, and respect the opinions of other team members, while contributing an appropriate level of expertise to patient care

Leader

- During the Clerkship in internal medicine, the medical student will deepen his/her understanding of the appropriate use of health care resources in the internal medicine context. Students are also expected to manage their own time in an efficient manner

Health Advocate

- Accept appropriate responsibility for the health of patients assigned to their care
- Recognize important determinants of health and principles of disease prevention pertinent to internal medicine
- Act as an advocate on behalf of patients assigned to their care, when interacting with other members of the health care team

Scholar

- Demonstrate the ability to engage in self-directed learning
- Assist in teaching others and in the facilitation of their learning where appropriate
- Demonstrate the ability to search the evidence-based medicine literature for evidence to support the diagnostic and therapeutic management of their patients

Professional

Throughout the Clerkship in internal medicine, the medical student will:

- Behave in an altruistic manner
- Demonstrate reliability and a strong sense of responsibility
- Demonstrate a commitment to excellence via self-improvement and adaptability
- Demonstrate respect for others, as in the course of relationships with students, faculty, and staff
- Demonstrate honour and integrity by upholding student and professional codes of conduct

B. Educational core objectives

I. Procedures & Interpretive Skills

By the end of this internal medicine clerkship rotation, the student should be able to demonstrate basic proficiency in the following procedural and interpretive skills. Competence to complete these skills may be acquired during clinical shifts, seminars, bedside teaching or on other rotations.

i. Arterial blood gases

ii. Diagnostic imaging (chest, abdomen, and brain)

iii. Electrocardiograms (MI, rhythm, conduction blocks, etc.)

iv. Diagnostic Laboratory Results (biochemistry, haematology, microbiology)

II. Problem Based Skills

By the end of this internal medicine clerkship rotation, the student should be able to demonstrate an approach to patients presenting with the following problems (including differential diagnosis, investigations, and appropriate further investigations and management plans for each of the identified problems):

Cardiorespiratory

- Cardiac arrest / respiratory arrest
- Chest discomfort
- Cough
- Cyanosis / hypoxemia / hypoxia
- Dyspnea
- Edema
- Hemoptysis
- Hypercarbia
- Hypoxemia and hypoxia
- Insomnia / sleep-apnea syndrome
- Murmurs / extra heart sounds
- Palpitations (abnormal ECG, arrhythmias)
- Shock, hypotension
- Syncope, presyncope, loss of consciousness
- Wheezing

Gastrointestinal / hepatobiliary

- Abdominal pain
- Ascites

Hematologic/oncologic

- Leukocytosis
- Leukopenia
- Anemia
- Bleeding tendency/bruising
- Lymphadenopathy, Splenomegaly
- Polycythemia
- Febrile neutropenia

Rheumatologic

- Joint pain (mono-articular and poly-articular)
- Back pain

Neurological

- Coma / impaired consciousness
- Confusion / delirium
- Dementia / memory disturbances
- Diplopia
- Dizziness / vertigo
- Gait disturbances /Ataxia
- Headache

- Abnormal liver enzyme levels
- Blood in stool (hematochezia and melena)
- Constipation
- Diarrhea
- Dysphagia
- Hematemesis
- Abnormalities of liver synthetic function
- Jaundice
- Vomiting, nausea

Renal / fluid-electrolyte

- Metabolic acidosis and alkalosis
- Respiratory acidosis and alkalosis
- Hypo- and hyperkalemia
- Hypo- and hypernatremia
- Hematuria
- Hypertension
- Proteinuria
- Urinary frequency (associated with dysuria; associated with polyuria)
- Oliguria

Endocrine

- Hyperglycemia
- Hypo- and hypercalcemia
- Hirsutism and virilisation
- Numbness and tingling
- Pupil abnormalities
- Seizures
- Speech and language abnormalities
- Tremor
- Visual disturbance / loss
- Weakness / paralysis

Geriatrics

- Falls
- Failure to thrive (elderly)
- Urinary incontinence (elderly)
- Polypharmacy
- Capacity assessment

Other topics

- Allergic reactions
- Dying patient
- Fatigue
- Fever and chills
- Pain
- Overdose/ Toxidrome (Especially ASA, Acetaminophen, Opioid, Benzodiazepine, Cocaine)
- Substance abuse, drug addiction, withdrawal
- Weight gain/ obesity
- Weight loss/malnutrition

Learning resources

Andreoli, T et al, eds., Cecil Essentials of Medicine, 9th edition, 2015.

The Toronto Notes, 2015 edition, chapters on internal medicine topics

Find more details at:

http://www.deptmedicine.utoronto.ca/edustudies/Undergraduate_Studies/orange_booklet.htm

Core Clinical Rotation: Obstetrics & Gynaecology (6 weeks)

Course Director	Course Administrator

Clerkship courses – YEAR 3

Dr. Rajiv Shah rajivrobert.shah@utoronto.ca	Jeannette Moniz obgyn.ug@utoronto.ca 416-946-0305

Site Directors/Assistants

Site	Director (Faculty)	Assistant
MSH	Dr. Mara Sobel msobel@mtsinai.on.ca	Sylvia Muir smuir@mtsinai.on.ca
NYGH	Dr. Karthika Devarajan kartika.devarajan@utoronto.ca	TBD
SJHC	Dr. Sybil Judah sybil.judah@utoronto.ca Dr. Yolanda Kirkham yolanda.butt@mail.utoronto.ca	Chelsea Houde choude@stjoestoronto.ca
SMH	Dr. Eva Mocarski mocarskie@smh.ca Dr. Dana Soroka sorokad@smh.ca	Charlotte Aziz azizc@smh.ca
SHSC	Dr. Dini Hui dini.hui@sunnybrook.ca	Monika Selimovic obgyn@sunnybrook.ca
Michael Garron Hospital	Dr. Roberta MacKenzie roberta.mackenzie@utoronto.ca	Joanne Mount j.mount@utoronto.ca
THP-CVH	Dr. Scott Tigert scott.tigert@trilliumhealthpartners.ca	Kay Pantarotto kay.pantarotto@trilliumhealthpartners.ca
THP-MH	Dr. Dalip Bhangu dalip.bhangu@trilliumhealthpartners.ca	Kay Pantarotto kay.pantarotto@trilliumhealthpartners.ca
TSH	Dr. Haidar Mahmoud Haidar96@gmail.com	TBD
WOHS – Brampton	Dr. Kiran Sahi k_s2436@yahoo.ca	TBD
WOHS –	Dr. Koo Chun	TBD

Etobicoke	koo@chunkerhead.com	

Course overview

Each student spends six weeks participating in a variety of clinical activities related to women's health care, including rotations in labour and delivery, inpatient antenatal and postpartum units, antenatal clinics, gynaecologic ambulatory care, inpatient gynaecology units, and the operating room. In addition to clinical activities, the students attend small-group teaching seminars on a range of obstetrical and gynaecological topics. Students are assigned to one of eight teaching hospital sites. Students assigned to St. Michael's Hospital may have a sub-rotation at Toronto Scarborough Hospital, Birchmount Campus and students assigned to Trillium Health Partners may have a sub-rotation at William Osler Health System, Brampton or Etobicoke site.

Teaching methods

In all clinical settings, the student is responsible for taking complete obstetrical and gynaecological histories. Students will also develop their pelvic examination skills under the supervision of their clinical teacher and with the consent of the patient. Students are expected to formulate differential diagnoses and management plans. All patients seen by the student are reviewed by the obstetrics and gynaecology resident or a staff physician.

A comprehensive orientation is conducted on the first day of the clerkship rotation where students are provided with information regarding expectations, schedules, on call, and evaluations. The approach to the pelvic examination is initially taught through the use of pelvic exam videos and practice on pelvic models with supervision by a faculty member and/or resident. This initial instruction is further consolidated when students have an opportunity to perform the pelvic examination in the clinical setting.

A standardized seminars series designed for the Clerkship level will be conducted by staff physicians. The seminar teaching methods are based on the principles of small-group learning characterized by active participation, problem-solving, and reflection. In addition to the seminar series, each hospital site conducts its own set of teaching and/or grand rounds meant for the hospital staff, which students are also expected to attend. Students are also encouraged to engage in interprofessional learning opportunities as other health care professionals such as nurses, midwives, social workers, respiratory technologists, and others, are greatly involved in patient care.

Clerkship courses – YEAR 3

Each student will have access to the Obstetrics & Gynaecology Clerkship syllabus which contains a handout for each of the topics covered in the seminar series. The syllabus is available electronically on the course website.

Assessment

There are three components which numerically contribute equally to the final evaluation:

- Written examination (33.3%)
- Structured clinical oral examination (33.3%)
- Ward/clinical skills evaluation (33.3%)

The written and oral examinations are conducted during the final week of the rotation. The ward evaluation is completed by the site coordinator, incorporating evaluations obtained during the course of the rotation from faculty members, residents and fellows who had sufficient contact with the student. Students must receive 60% or more on each of the 3 components in order to pass (i.e. receive Credit in) the course. Each component is weighted one third (33.3%) in the calculation of the final grade. A mark less than 60% on any one or more of the three components will lead to failure (No Credit) of the course.

Other Assessment Tools for Credit/No Credit

- Professionalism evaluation
- Case Log encounters – completion of mandatory problems and procedures
- Mandatory Observed History-Taking and Physical Examination Evaluation

For details, including grading regulations, see the course website on the U of T portal (http://portal.utoronto.ca – registered users only), and the program policies related to examination and assessment (http://www.md.utoronto.ca/policies).

Course objectives

The Obstetrics & Gynaecology Clerkship rotation is designed to further develop and consolidate the knowledge, skills and attitudes acquired in Preclerkship and to achieve clinical competence in managing common and important clinical problems that women may present within the discipline of obstetrics and gynaecology. The Obstetrics & Gynaecology Clerkship objectives are based on the CanMEDS competencies and meet the ED-2 standard of the LCME.

A. General competencies

With respect to all the general competencies, the medical student should achieve the following:

Medical Expert

- Demonstrate the ability to assess and manage common and important problems which women will present within the discipline of Obstetrics & Gynaecology
- Demonstrate the ability to take an obstetrical, gynaecological and sexual history
- Develop a working differential diagnosis and management plan
- Develop plans for investigation and interpret these investigations
- Understand and explain the risks and benefits of investigations and treatments.
- Demonstrate competency in pelvic examination and other basic procedural skills relevant to the discipline of obstetrics and gynaecology

Communicator

- Communicate effectively and empathetically with patients and their families
- Ensure that women have given informed consent before conducting and/or being present for examinations or procedures
- Communicate effectively, respectfully and empathetically with women while performing and/or assisting at examinations and/or procedures
- Demonstrate thorough and clear documentation and charting with concise recording of pertinent positive and negative findings
- Demonstrate the ability to council and educate patients and families
- Provide clear discharge instructions for patients and ensure appropriate follow-up care
- Demonstrate the ability to present a patient case in a clear, concise, and complete manner

Collaborator

- Establish and maintain effective working relationship with colleagues and other health care professionals
- Demonstrate an understanding of the concept of triage and prioritization of care in management of multiple patients simultaneously in the labour and birth unit
- Demonstrate knowledge of other resources available to women when providing prenatal, intrapartum, postpartum, and gynaecological outpatient and inpatient care
- Maintain respect for the role of the patient's primary care provider by ensuring that the provider is informed about the patient's care plan

Leader

- Demonstrate appropriate and cost-effective use of investigations and treatments
- Develop an understanding of the organizational skills and efficiency required in managing patients and maintaining patient flow

- Develop an understanding of the factors contributing to resource issues in outpatient prenatal and gynaecology clinics, in-hospital labour and birth and postpartum units, and inpatient gynaecologic and peri-operative services

Health Advocate

- Respond to the individual woman's health care needs and issues as part of patient care
- Understand the health needs of the community of women served by the health care unit
- Identify the determinants of health of the population of women that are served by the health care unit
- Understand methods to promote the health of individual women, communities, and populations

Scholar

- Access and critically appraise the literature relevant to obstetrics and gynaecology care
- Understand the many unique learning and teaching opportunities available in obstetrics and gynaecology

Professional

- Attend scheduled and assigned teaching and clinical responsibilities in a timely fashion
- Communicate with educational administrators and clinicians when not able to attend scheduled assignments in a timely fashion
- Recognize and accept his or her limitations and know when to ask for help
- Protect information provided by or about patients, keeping it confidential, and divulge it only with the patient's permission except when otherwise required by law
- Be reliable and responsible in fulfilling obligations
- Recognize situations where common medical errors may occur

B. Educational core objectives

I. Skills - technical and procedural

By the end of the Obstetrics and Gynaecology Clerkship rotation, the medical student should be able to perform the skills/procedures listed below. Competency to complete these skills may be acquired during clinical shifts, seminars, workshops, or simulations.

1. Bimanual pelvic examination
2. Vaginal speculum insertion
3. Cultures of vagina and cervix
4. Pap test
5. Fetal heart rate tracing interpretation –
9. GBS (group B streptococcus) culture for antenatal screening
10. Nitrazine test for SROM
11. Fern testing for SROM (spontaneous rupture of membranes)

normal and abnormal tracings
6. Fetal heart auscultation with doptone
7. Leopold manoeuvres
8. Symphysis fundal height measurement
12. Cervical examination during labour
13. Spontaneous vaginal birth
14. Delivery and examination of placenta
15. Obtaining cord blood

II. Problem-based encounters

By the end of the Obstetrics & Gynaecology Clerkship rotation, the student should be able to demonstrate an approach (including differential diagnosis, investigation and initial treatment) to women presenting for antenatal care, intrapartum care, gynaecological consultation (outpatient, inpatient, emergency room), and gynaecologic surgery, based on real or simulated encounters listed with the following issues:

Gynaecological:

1. Abnormal vaginal bleeding (pre and postmenopausal)
2. Adnexal mass and/or ovarian cyst
3. Amenorrhea/oligomenorrhea
4. Contraceptive methods
5. First trimester or early second trimester complications:
    a. Spontaneous abortion
    b. Unwanted pregnancy and therapeutic abortion
    c. Ectopic pregnancy
    d. Recurrent pregnancy loss
6. Dysmenorrhea
7. Dyspareunia
8. Endometriosis
9. Fibroids
10. Genital tract infections
11. Incontinence
12. Infertility
13. Irregular periods
14. Menopausal counselling
15. Pap test counselling
16. Pelvic pain – acute and chronic
17. Post-gynaecologic surgery complications
18. Sexual disorders
19. Urogenital prolapse/disorder
20. Vaginal discharge
21. Vulvar lesion or pruritis

Obstetrical:

1. Antepartum haemorrhage
2. Assisted birth (vacuum, forceps, Caesarean delivery)
3. Fetal well-being issues:
    a. Genetic screening and prenatal diagnosis
7. Labour progression – normal and abnormal
8. Pain management in labour
9. Preterm labour
10. Preterm premature rupture of membranes
11. Nausea and vomiting in pregnancy
12. Postpartum care and complications:

   b. Small/large for gestation age fetus
   c. Management of Rh negative status
   d. Fetal demise
4. Diabetes in pregnancy
5. Hypertension in pregnancy
6. Induction of labour
   a. Postpartum hemorrhage
   b. Postpartum fever
   c. Postpartum mood disorder
13. Obstetrical emergencies
14. Obstetrical ultrasound

Textbook/learning resources

- Essentials of Obstetrics and Gynecology, 5th Edition, Hacker and Moore; W. B. Saunders, 2010
- Basic Gynaecology and Obstetrics, Normal F. Gant, F. Gary Cunningham; Appleton and Lange, 1993
- Clinical Gynaecology, Endocrinology, and Infertility, 7th Edition, Leon Speroff and Marc A. Fritz; Lippincott Williams & Willkins, 2005
- Novak's Textbook of Gynaecology, 12th Edition, Jones, Wentz, Burnett; Williams and Wilkins, 1996
- Williams Obstetrics, 23nd Edition, Cunningham, Leveno, Bloom, Hauth, Rouse; The McGraw-Hill Companies, Inc, 2010
- www.sogc.org
- http://thehub.utoronto.ca/obgyn/

Core Clinical Rotation: Ophthalmology (1 week)

Course Director	Course Administrator
Dr. Daniel Weisbrod dan.weisbrod@utoronto.ca	educationdovs@utoronto.ca 416-978-6294

Site Directors/Assistants:

Site	Director (Faculty)	Assistant
TWH	Dr. Marisa Sit marisa.sit@gmail.com	Mirella Marcantonio mirella.marcantonio@uhn.ca
SHSC	Dr. Radha Kohly radha.kohly@utoronto.ca	Charlene Muller charlene.muller@sunnybrook.ca
SMH	Dr. Filberto Altomare altomaref@smh.ca	Helen Son sonh@smh.ca
MSH	Dr. Paul Sanghera gpsanghera@gmail.com	Rebecca Scott rscott@mtsinai.on.ca

HSC	Dr. Nasrin Tehrani nasrin.tehrani@sickkids.ca	Karen Martin karen.martin@sickkids.ca
MAM	Dr. Devesh Varma deveshvarma@me.com	Lorraine Ferraro lferraro@thc.on.ca

Course overview

The one-week Ophthalmology course is part of the Anesthesia / Emergency Medicine / Ophthalmology / Otolaryngology rotation. During the Ophthalmology block, students are exposed to a variety of ambulatory ophthalmology patients by attending the eye clinics of their Academy or in the offices of attending ophthalmologists during the first four days. On the first day (Monday morning), there will be a clinical skills review and orientation session where students review the history and physical examination relevant to ophthalmology. On the fifth day (Friday morning), all students attend seminars on paediatric ophthalmology at the Hospital for Sick Children (HSC). This paediatric teaching half-day is shared with Otolaryngology. On the fourth Friday of the combined rotation, students take separate written examinations in Ophthalmology, Otolaryngology, and Anesthesia.

Students are expected to review the course syllabus independently. It is provided on the course portal and covers the following topics: cornea and anterior segment (the red eye), lens and optics, glaucoma, retina, uveitis and inflammatory diseases, neuroophthalmology, oculoplastics and orbital diseases, paediatric ophthalmology and strabismus, and ocular emergencies and trauma.

In clinic, students are responsible for examining patients, which may involve taking an ophthalmic history and performing a relevant ocular examination, as well as formulating a differential diagnosis and plan of management. All patients seen in the clinic are reviewed by an ophthalmology staff, fellow or resident. Students are expected to research each assigned patient's disease using appropriate texts and journals. Students may also be scheduled to attend the operating room for a half day. Otherwise, attendance in the operating room may be arranged at their Academy and/or with a supervisor at the beginning of the rotation if it has not already been formally scheduled. Students are not expected to take call, but if interested, they may request to do so through the ophthalmology residents at their hospital or academy.

Assessment

- Written examination (65%)
- Clinical performance evaluation, based on assessment of student's clinical work during the rotation (35%)
- Professionalism evaluation (Credit/No Credit)

- Case Log requirements (Credit/No Credit)

The final mark is transcribed in Credit/No Credit format. In order to pass the course, a grade of 60% of higher on both the written examination and the final mark must be obtained. Failure to meet these criteria will result in the student being presented to the Board of Examiners for consideration of remediation.

For details, including grading regulations, see the course website on the U of T portal (http://portal.utoronto.ca – registered users only), and the program policies related to examination and assessment (http://www.md.utoronto.ca/policies).

NB: In order to receive credit for Ophthalmology, students must also complete the required evaluations of teachers andthe course, as specified in the course outline, in conformity with the *Principles and Expectations for Student Completion of Teacher and Course Evaluations in UME (PDF).*

Course objectives

By the end of the Ophthalmology clerkship rotation, the clinical clerk will demonstrate the foundation of knowledge, skills, and attitudes necessary for the practice of Ophthalmology from the perspective of the primary care physician.

A. General competencies

The clinical clerk will be able to:

Medical Expert

- Demonstrate the ability to initially assess and manage common ophthalmic problems presenting to the primary care physician (see B.II below)
- Demonstrate
    - The ability to rapidly recognize and initiate management of ocular emergencies and trauma.
    - A systematic, prioritized approach diagnosing common ophthalmic presentations.
    - The ability to distinguish those ophthalmic conditions requiring immediate referral to an ophthalmologist.
- Take a focused history and perform a physical examination for patients presenting with common ocular symptoms
- Develop a working differential diagnosis and management plan
- Develop plans for investigations and interpret these investigations
- Understand and explain the risks and benefits of investigations and treatments

- Demonstrate competency in basic diagnostic and procedural skills relevant to ophthalmic conditions (see B.I below)

Communicator

- Communicate effectively and empathetically with patients and their families
- Demonstrate thorough and clear documentation and charting, with concise recording of pertinent positive and negative findings
- Demonstrate the ability to manage difficult or violent patients in the eye clinic
- Demonstrate the ability to council and educate patients and families in the eye clinic
- Provide clear discharge instructions for patients and ensure appropriate follow-up care
- Demonstrate the ability to present a patient case in a clear, concise, and complete manner

Collaborator

- Establish and maintain effective working relationships with colleagues and other health care professionals
- Discuss the roles of the various providers of hospital care and the role of the ophthalmologist in triaging consults from the emergency department, operating room, and in-patient units
- Demonstrate knowledge of community resources available to the ophthalmologist
- Respect the role of the patient's primary care physician by soliciting input in the assessment, the development of the care plan, and follow-up

Leader

- Demonstrate appropriate and cost-effective use of investigations and treatments
- Develop organizational skills and efficiency in managing patients and maintaining patient flow
- Develop an understanding of the factors contributing to resource issues in the eye clinic

Health Advocate

- Demonstrate an awareness of the underlying psychosocial and socioeconomic problems that may precipitate an eye clinic visit
- Discuss the role of the ophthalmologist in the health care system and how it relates to other hospital and community health services
- Demonstrate an understanding of legal and ethical issues surrounding ophthalmic care
- Identify opportunities for primary and secondary prevention in the eye clinic and council patients accordingly

Scholar

- Access and critically appraise the literature relevant to ophthalmic care
- Understand the many unique learning and teaching opportunities available in ophthalmology

Professional

- Recognize and accept his or her limitations and know when to ask for help
- Protect information provided by or about patients, keeping it confidential, and divulge it only with the patient's permission except when otherwise required by law
- Be reliable and responsible in fulfilling obligations
- Recognize situations where common medical errors may occur in the eye clinic

B. EDUCATIONAL CORE OBJECTIVES

I. Skills

By the end of the Ophthalmology Clerkship rotation, the student should be able to demonstrate basic proficiency in the following skills.

Clinical Examination Skills:

1. Visual acuity measurement
2. Confrontation visual fields
3. Pupil examination
4. Extraocular motility/strabismus examination
5. External/adnexal examination
6. Slit lamp examination
7. Direct fundoscopy

Technical Skills:

1. Application of eye patch
2. Eversion of eyelid

II. Problem based

By the end of the Ophthalmology Clerkship rotation, the student should understand the following concepts and/or be able to demonstrate an approach to patients presenting to the Emergency Department (based on real or simulated encounters) with the following problems or conditions (including differential diagnosis, investigations, and initial treatments):

1. Structure and Basic physiology of the eye (from BRB)
   a. Anterior and posterior segment
   b. Eyelids, orbit and lacrimal system
   c. Extraocular muscles and cranial nerves
2. Cornea and Anterior Segment (The Red Eye)
   a. Redness of the ocular adnexa
   b. Redness of the globe (eg. conjunctivitis, iritis)
7. Neuroophthalmology
   a. Diseases of the optic nerve (e.g. optic neuritis, optic neuropathies, optic atrophy)
   b. Anisocoria
   c. Diplopia & ocular misalignment
   d. Cranial neuropathies
   e. Myasthenia gravis
   f. Migraine and headaches
8. Oculoplastics and Orbital Diseases

   c. Corneal disorders
3. Lens and Optics
   a. Myopia, hyperopia, astigmatism and presbyopia
   b. Cataracts
4. Glaucoma
   a. Primary open angle glaucoma
   b. Acute angle closure glaucoma
   c. Secondary glaucoma
5. Retina
   a. Diabetic retinopathy
   b. Hypertensive retinopathy
   c. Retinal vascular occlusive diseases
   d. Retinal detachment
   e. Age-related macular degeneration (AMD)
6. Uveitis and Inflammatory Conditions
   a. Iritis
   b. Seronegative spondyloarthropathies, juvenile rheumatoid arthritis (JRA), collegen vascular diseases and sarcoidosis
   c. Infectious causes of uveitis
   d. Leukemia and lymphoma
   e. Choroidal tumours
   a. Inflammatory diseases of the eyelids
   b. Eyelid malpositions and tumours
   c. Graves disease
   d. Inflammatory diseases of the orbit
   e. Preseptal and orbital cellulitis
   f. Orbital tumours
   g. Inflammatory diseases of the lacrimal system
9. Pediatric Ophthalmology
   a. Amblyopia and strabismus
   b. Congenital cataracts
   c. Orbital cellulitis
   d. Leukocoria
10. Ocular Emergencies and Trauma
   a. Blunt trauma (including hyphema)
   b. Penetrating injuries
   c. Foreign bodies
   d. Alkali injuries
11. Ocular pharmacology
   a. Diagnostic agents
   b. Therapeutic agents: Glaucoma medications, anti-infectives and immunosuppressives (steroids)

Textbooks/learning resources

The recommended text for the ophthalmology Clerkship is:
"Basic Ophthalmology for Medical Students and Primary Care Residents, 8th ed", by CA Bradford, American Academy of Ophthalmology 2004. Students should also review their ophthalmology notes/materials from Brain and Behaviour (Year 1), Mechanisms, Manifestations, & Management of Disease (Year 2), and the Ocular Examination from ASCM-1 and -2 prior to the start of the rotation. Year 3 students have online portal access to the course syllabus and ophthalmology case scenarios, as well as useful external links.

Core Clinical Rotation: Otolaryngology – head & neck surgery (1 week)

Course Director	Course Administrator

Clerkship courses – YEAR 3

Dr. Allan Vescan avescan@mtsinai.on.ca	Michael Figueiredo mike.figueiredo@utoronto.ca 416-946-8743

Site Directors/Assistants

Site	Director (Faculty)	Assistant
HSC	Dr. Evan Propst evan.propst@utoronto.ca	Aja Dykes aja.dykes@sickkids.ca
MAM	Dr. Yvonne Chan y.chan@utoronto.ca	Michael Figueiredo mike.figueiredo@utoronto.ca
MSH	Dr. Allan Vescan avescan@mtsinai.on.ca	Dorian Lucchetta dlucchetta@mtsinai.on.ca
SHSC	Dr. Jean Davidson jean.davidson@sunnybrook.ca	Lyn Snelling lyn.snelling@sunnybrook.ca
SMH	Dr. John Lee jlee.ut@gmail.com	Julia Chapman chapmanj@smh.ca
UHN – PMH	Dr. Dale Brown dale.brown@uhn.ca	Jeverlyn Danzie (Aug-Sept 2016) jeverlynn.danzie@uhn.ca Christin Cooper (Sept 2016 – onwards) christin.cooper@uhn.ca
Michael Garron Hospital	Dr. Al Chiodo achiodo@rogers.com Dr. Bradley Hubbard brad.hubbard@mail.utoronto.ca	Michael Figueiredo mike.figueiredo@utoronto.ca
TSH	Dr. Deron Brown deronbrown@gmail.com	Michael Figueiredo mike.figueiredo@utoronto.ca
NYGH	Dr. Manish Shah manish.shah@nygh.on.ca Dr. Everton Gooden evertongooden@gmail.com	Michael Figueiredo mike.figueiredo@utoronto.ca Michelle Clarke michelle.clarke@nygh.on.ca
Markham-	Dr. Jeff Werger	

Stouffville	doc@drwerger.ca Dr. Bosco Lui luibosco@outlook.com	Michael Figueiredo mike.figueiredo@utoronto.ca
William Osler – Etobicoke	Dr. David Hacker dhacker@nasalcosmetic.com Dr. Jason Atlas atlas.jason@gmail.com	Michael Figueiredo mike.figueiredo@utoronto.ca
Humber River Regional	Dr. Raewyn Seaberg raewyn.seaberg@mail.utoronto.ca	Michael Figueiredo mike.figueiredo@utoronto.ca

Course overview

The one-week Otolaryngology block is part of the Anesthesia / Emergency Medicine / Ophthalmology / Otolaryngology rotation. The Otolaryngology portion takes place at the otolaryngology clinics at the University Health Network, Sunnybrook Health Sciences Centre, St. Michael's Hospital, and Mount Sinai Hospital. This year, some students will be completing their week rotation in a community site such as Michael Garron Hospital, North York General Hospital, Humber River Regional Hospital, Markham-Stouffville Hospital, William Osler Hospital (Etobicoke Site), or The Scarborough Hospital. Each hospital develops and distributes a site-specific schedule of teaching sessions and clinical experience in the outpatient clinics. The remainder of the time will be spent on the wards, in the operating room, on seminars and self-directed learning with otoscopy and nasal packing simulators and online cases. The rotation includes a series of online seminars, covering common and important topics in otolaryngology including hearing loss, vertigo, epistaxis, rhinosinusitis, emergencies, and head and neck malignancies. Students are also given a paediatrics otolaryngology seminar, an Otosim seminar, and an audiology lecture at the Hospital for Sick Children.

In clinic, students will be responsible for taking complete otolaryngologic histories and performing relevant head and neck examinations on patients, as well as formulating differential diagnoses and plans of management which will be presented to preceptors.

Attendance in the operating room is available to students and may be arranged at their academy with the site director at the beginning of their rotation.

Students are not expected to take call, but may do so if interested. Call may be arranged with the otolaryngology residents at each hospital/academy.

Assessment

Evaluations are based on performance on a written exam in multiple-choice question format (80%) and preceptor evaluations (20%). The written exam is given on the final day of the combined four-week Otolaryngology / Ophthalmology / Anesthesia block. The written exam is one hour in duration and is separate from the Ophthalmology and Anesthesia examinations.

In order to obtain Credit in the Otolaryngology course, students must receive a grade greater than 60% on both the written examination and preceptor evaluation.

Students must also receive a satisfactory Professionalism evaluation (Credit/No Credit) and complete all Case Log requirements (Credit/No Credit) in order to pass the Otolaryngology clerkship.

For details, including grading regulations, see the course website on the U of T portal (http://portal.utoronto.ca – registered users only), and the program policies related to examination and assessment (http://www.md.utoronto.ca/policies).

NB: In order to receive credit for Otolaryngology – Head & Neck Surgery, students must also complete the required evaluations of teachers and of the course, as specified in the course outline, in conformity with the *Principles and Expectations for Student Completion of Teacher and Course Evaluations in UME (PDF)*.

Course objectives

GOALS: By the end of the Otolaryngology clerkship rotation, the clinical clerk will demonstrate the foundation of knowledge of medical conditions involving the ears, nose, neck, and upper aerodigestive tract necessary for the practice of otolaryngology from the perspective of the primary care physician. In addition, the clinical clerk will demonstrate the skills necessary to perform a thorough head and neck examination.

The Otolarygology clerkship course follows the CanMEDS Guidelines through both didactic and clinical teaching. The course also provides an opportunity to develop Collaborator and Manager skills through interprofessional collaboration with nursing, audiology, and speech-language pathology services.

A. General competencies

By the end of the Otolaryngology clerkship, the clinical clerk will be able to:

Medical Expert

- Demonstrate the ability to evaluate and manage common ear, nose and throat problems presenting to the primary care physician
- Demonstrate the ability to rapidly recognize airway and head and neck oncologic emergencies that require immediate referral to an otolaryngologist
- Demonstrate a focused history and physical examination for patients presenting with common ear, nose and throat symptoms
- Develop plans for investigations (diagnostic imaging and audiometry) and interpret those investigations
- Develop a differential diagnosis and management plan

Communicator

- Communicate effectively and empathetically with patients and their families
- Demonstrate thorough and clear documentation and charting, with concise recording of pertinent positive and negative findings
- Demonstrate the ability to council and educate patients and families
- Demonstrate the ability to present a patient case in a clear, concise and complete manner

Collaborator

- Establish and maintain effective working relationships with colleagues and other health care professionals commonly treating otolaryngology patients (nursing, audiology, speech language pathology)
- Demonstrate knowledge of community resources available to the otolaryngologist

Manager

- Demonstrate appropriate and cost-effective use of investigations and treatments
- Develop organizational skills and efficiency in managing patients and maintaining patient flow
- Develop an understanding of the factors contributing to resource issues in the otolaryngology clinic

Health Advocate

- Demonstrate an awareness of the underlying psychosocial and socioeconomic problems that contribute to otolaryngologic problems
- Identify opportunities for primary and secondary prevention strategies (smoking cessation, alcohol intake, etc.)

Scholar

- Access and critically appraise the literature relevant to otolaryngology
- Understand the many unique learning and teaching opportunities available in otolaryngology

Professional

- Recognize and accept his or her limitations and know when to ask for help
- Protect information provided by or about patients, keeping it confidential, and divulge it only with the patient's permission except when otherwise required by law
- Be reliable and responsible in fulfilling obligations
- Recognize situations where common medical errors may occur in the otolaryngology clinic

B. EDUCATIONAL CORE OBJECTIVES

I. Skills

By the end of the Otolaryngology Clerkship rotation, the student should be able to demonstrate basic proficiency in the following skills.

Clinical Examination Skills:

1. Head and neck examination
2. Thyroid examination
3. Oral examination
4. Cranial nerve examination
5. Balance testing

Technical Skills:

1. Otoscopy
2. Nasal packing (simulation)

II. Problem based

By the end of the Otolaryngology Clerkship rotation, the student should understand the following concepts and/or be able to demonstrate an approach to patients presenting to the Emergency Department (based on real or simulated encounters) with the following problems or conditions:

1. Hearing Loss
2. Vertigo
3. Nasal Obstruction
4. Epistaxis
5. Neck Mass
6. Strido

Textbooks/learning resources

Required Reading

The Otolaryngology course syllabus, available on the Portal in the Lecture Notes section, contains the core material on which the written examination is based. Clerks must also review the interactive cases posted on the portal site.

Recommended Reading

Textbooks: Head and Neck Surgery – Otolaryngology. Byron J Bailey and Jonas T Johnson eds.

Online resources available through the OTL310 Portal site:

- Baylor College of Medicine: https://mediasrc.bcm.edu/documents/2013/ec/otolaryngology-core-curriculum.pdf
- Otolaryngology Houston: http://www.ghorayeb.com/pictures.html
    - Martindale's The "Virtual" Medical Centre: http://www.martindalecenter.com/http://www.md.utoronto.ca/registration-requirements-requestsMedicalAudio_2_C.html

Also, visit the Canadian Society of Otolaryngology – Head and Neck Surgery website at www.entcanada.org and follow the link for "Undergraduate Education."

Core Clinical Rotation: Paediatrics (6 weeks)

Course Director	Course Administrator
Dr. Angela Punnett angela.punnett@sickkids.ca	Mary Antonopoulos mary.antonopoulos@sickkids.ca 416-813-6277

Site Directors/Assistants

Site	Director (Faculty)	Assistant
Sick Kids – Inpatient Medicine	Dr. Hosanna Au hosanna.au@sickkids.ca	Mary Antonopoulos mary.antonopoulos@sickkids.ca
Sick Kids – ER	Dr. Krishna Anchala krishna.anchala@sickkids.ca Dr. Claudio Fregonas	Angie Frisk angie.frisk@sickkids.ca

	claudio.fregonas@sickkids.ca	
HRRH	Dr. Gilbert Miller drgilmiller@hotmail.com Dr. Sally Kenaway skenawy@hrrh.on.ca	Angella Chamber achambers@hrrh.on.ca
Mackenzie Health	Dr. Jeff Weisbrot jfweisbrot@rogers.com	Mirella Puopolo mpuopolo@yorkcentral.on.ca
NYGH	Dr. Shawna Silver shawna.silver@nygh.on.ca Dr. Clare Hutchinson claremhutchinson@gmail.com	Lisa Lindsay-Rose llrose@nygh.on.ca
RVCH	Dr. Yehuda Mozes mozes@rogers.com	Tobi Odueke todueke@rougevalley.ca
TSH – Birchmount	Dr. Kushal Raghubir kushal.raghubir@rogers.com	Anne Davies adavies@tsh.to
TSH – General	Dr. Leah Tattum lt@tattum.com	
SJHC	Dr. Sharon Naymark snaymark@yahoo.ca Dr. Mara Cole Mara.cole@mail.utoronto.ca	Chelsea Houde choude@stjoestoronto.ca
Michael Garron Hospital	Dr. Janet Saunderson janet.saunderson@sympatico.ca	Joanne Mount family.tegh@utoronto.ca
THP – Credit Valley Hospital	Dr. Dror Koltin dror.koltin@trilliumhealthpartners.ca	Kay Pantarotto kay.pantarotto@trilliumhealthpartners.ca
THP – Mississauga Hospital	Dr. Kate Gwiazda katarzyna.gwiazda@trilliumhealthpartners.ca	Kay Pantarotto kay.pantarotto@trilliumhealthpartners.ca
WOHC – Brampton	Dr. Gaugan Saund gagan30@gmail.com Dr. Anna Selliah pselliah@rogers.com	Carla Dovigo carla.dovigo@williamoslerhs.ca

Clerkship courses – YEAR 3

Course overview

Students will be exposed to a combination of ambulatory and inpatient paediatrics by placements in **ONE** of the following paediatrics practice settings:

1. A six- week rotation in a Community Hospital – paediatric setting
2. A six- week rotation which will include three weeks at The Hospital for Sick Children on the paediatric wards, and three weeks in an ambulatory Paediatric practice (s).
3. A six-week rotation which will include three weeks at The Hospital for Sick Children on the Paediatric Emergency Department, and three weeks in an ambulatory Paediatric practice (s).

Course requirements

a. Seminars: Two full days will be devoted to an academic teaching program at SickKids at the start of the six-week rotation. **Attendance is mandatory**. Students placed at MAM sites and WOSH will have a core Neonatal Teaching for one half day at either THP–Credit Valley, or THP–Mississauga Hospital. Students placed at SickKids will have Neonatology Teaching on one full day back. Students at St. Joseph's Health Centre and North York General Hospital receive core neonatal teaching on rotation at their own hospital. Students at the other Community Hospitals will join SickKids for the core neonatal teaching in the morning (half day) and can return to their sites for the afternoon.

b. Observed History and Physical: Students must be observed while doing a complete history and physical examination in order to complete their Paediatric rotation.

c. CLIPP Cases: Computer Assisted Learning in Pediatrics Cases (CLIPP) offer students 32 comprehensive interactive cases that cover important core topics (www.med-u.org). **All third year clerks must complete ten cases, of which seven cases are required (cases 1, 11, 16, 17, 21, 23, and 26)** during the six-week rotation**.**

d. Case Logs: Students are provided with the required list of encounters and procedures to be completed during the course. Students must log the required encounters/procedures on MedSIS. At mid-rotation, **it is mandatory** to review progress toward completion of the Case Logs as part of their mid-rotation feedback conversation. The Education Office will review all Case Logs at the end of the rotation for completion.

e. Interim Feedback: Midway through the rotation, students will meet with their preceptors for formal, face-to-face feedback and to review their progress with meeting course requirements. This meeting will be documented in MedSIS on the Interim Feedback form.

Assessment

Student evaluations will be based on:

- Clinical performance assessments (50%),
- Written examination at the end of the rotation (50%)
- Observed history and physical examination (Credit/No Credit)
- Completion of 10 CLIPP cases (Credit/No Credit)
- Professionalism evaluation (Credit/No Credit)
- Case Log requirements (Credit/No Credit)

Students are required to obtain a pass (60%) in both the clinical evaluations and the written examination and to complete the other components in order to obtain a grade of Credit in Paediatrics. Failure to complete the Credit/No Credit components of the course will result in a final grade of 'incomplete'.

For details, including grading regulations, see the course website on the U of T portal (http://portal.utoronto.ca – registered users only), and the program policies related to examination and assessment (http://www.md.utoronto.ca/policies).

NB: In order to receive credit for Paediatrics, students must also complete the required evaluations of teachers and of the course, as specified in the course outline, in conformity with the *Principles and Expectations for Student Completion of Teacher and Course Evaluations in UME (PDF)*

Course objectives

Medical Expert

The medical graduate will be able to:

Objective	
1.1	Apply a science-based approach to the diagnosis and management of common clinical problems in childhood and adolescence and demonstrate an empathic approach appropriate to clinical paediatric practice, in relation to children, parents, health professionals, peers, others and self. *See content list below
1.2	Demonstrate a thorough knowledge of normal growth and development of infants, children and adolescents; their interaction with common paediatric clinical problems and their management, including the immunizations and anticipatory guidance necessary for the promotion of well-being and optimal development, and the prevention of infections and unintentional injury; as well as the recognition and

	management of life-threatening illness in these age groups.
1.3	Demonstrate:
a	The ability to obtain and document a comprehensive and focused medical and psychosocial history from a caregiver and a child/adolescent regarding the health and illness of infants, children and adolescents.
b	The ability to perform and document an opportunistic, comprehensive and focused physical and developmental examinations of infants, children and adolescent, as the situation requires.
c	The ability to select and interpret commonly-employed laboratory tests, including tests of blood and other body fluids, various imaging modalities, and other specific tests in infants, children and adolescents.
d	The ability to synthesize the data derived from the history, physical and laboratory assessments and formulate a problem-oriented approach to the infant's, child's or adolescent's health problems.
e	An approach to the common health problems of infants, children and adolescents including their treatment and ongoing management.
1.4	Retrieve, analyze, and synthesize relevant and current data and literature, using information technologies and library resources, to supplement information provided in syllabus and seminars in order to address clinical paediatric problems.
1.5	Apply an approach based on evidence and clinical expertise integrated with family values to the diagnosis and management of common paediatric clinical problems.

***Content [1.1]:** Students are expected to know the approach, signs and symptoms, differential diagnosis, and management of the following common paediatric presentations. These are derived from the Canadian Undergraduate Paediatric Directors CANUC PAEDS curriculum. See www.pupdoc.ca for supporting resources.

Core Clinical Presentations	Key Conditions
Paediatric Health Supervision	Nutrition, Growth, Hypertension, Active living, Mental health, Development, Immunizations, Anticipatory guidance, Injury Prevention, Vision/hearing, Dental health, Discipline/parenting, Sleep issues, SIDS, Crying/colic, Sexual development/health, Adolescent (HEADDSSS), Social/home context

Clerkship courses – YEAR 3

Newborn	Birth trauma, Depressed newborn, Prematurity, Respiratory distress, Sepsis, Hypothermia, Hypoglycemia, Dysmorphic features (T21, FAS, FASD), Congenital infections, SGA/LGA, Neonatal abstinence syndrome, Abnormal newborn screen, Abnormal exam (developmental dysplasia of the hip, undescended testes, ambiguous genitalia, absent red reflex), Vitamin K deficiency, Hypotonia
Neonatal Jaundice	Physiologic, Breastfeeding/Breastmilk, Biliary atresia, Hemolytic anemia, Kernicterus
Fever	UTI, Meningitis, Occult bacteremia/sepsis, Viral illness, Kawasaki disease
Dehydration	Mild/mod/severe, hypo/hypernatremia, DKA
Respiratory Distress/Cough	Asthma, Croup, Bronchiolitis, Pneumonia, Pertussis, Epiglottitis, Tracheitis, CF, CHF, Anaphylaxis, Foreign Body
Developmental and Behavioural Problems	Global delay, Delay in 1 domain, Specific patterns (ASD, ADHD), School refusal, Common issues (temper tantrums, sleep problems)
Growth Problems	Tall stature, Short stature, FTT, Anorexia, Obesity
Inadequately Explained Injury	Physical abuse, Neglect, Sexual abuse, Domestic violence
Abdominal Pain	Constipation, Functional, IBD, Infection (gastro, UTI), Instussusception, HSP, Gyne/GU
Vomiting	GER/GERD, Pyloric stenosis, Malrotation/volvulus, Intussusception, Intestinal atresia, Gastro, Meningitis, Pyelonephritis, Increased ICP
Diarrhea	Gastro, Celiac disease, HUS, IBD, Toddler's diarrhea, CF
Altered Level of Consciousness	Poisoning/intoxication, Seizure, Head injury, Meningoencephalitis, Hypoglycemia, Metabolic ds
Seizure/Paroxysmal Event	Febrile vs non-febrile, General vs focal, Status epilepticus, ALTE, Syncope, Breath-holding spell
Headache	Migraine, Brain tumour, Increased ICP, Concussion/trauma
Murmur	Innocent, CHD, Acyanotic (VSD, PDA, CoA)
Rash	Eczema, Viral exanthems, Diaper rashes, Seborrheic dermatitis, Impetigo, Cellulitis, Scarlet fever, Urticaria, Drug eruption, Scabies, Acne
Bruising and Bleeding	ITP, HSP, Haemophilia, Meningococcemia
Pallor/Anemia	Iron deficiency, Haemoglobinopathies, Hemolysis, Leukemia
Lymphadenopathy	Reactive, Benign, Cervical adenitis, Mononucleosis, Leukemia/Lymphoma

Limp/Extremity Pain	Growing pains, Trauma, Osteomyelitis, Septic arthritis, JIA, Reactive arthritis (RF, post-infectious, transient synovitis), Legg-Calve-Perthes, SCFE, Osgood-Schlatter, Malignancy (bone tumour, leukemia)
Urinary Complaints (polyuria, frequency, dysuria, hematuria)	UTI/VUR, Post-infectious GN, IgA nephropathy, DM, Wilm's tumour, Enuresis
Edema	Nephritic/Nephrotic syndromes, Cow's milk protein allergy, Renal failure
Sore Ear	Otitis media, Otitis externa
Sore Throat/Sore Mouth	Pharyngitis, Peritonsillar abscess, Dental disease, Retropharyngeal abscess, Stomatitis, Thrush
Sore Eye/Red Eye	Periorbital cellulitis, Orbital cellulitis, Conjunctivitis

Communicator

The medical graduate will be able to:

Objective	
2.1	Communicate effectively with infants, children and adolescents, their families and the community, through verbal, written and other non-verbal means of communication, demonstrating an understanding of the influence of family, community, society and their values on the infant's/ child's/ adolescent's health and respecting the differences in developmental stages, beliefs and backgrounds among patients and students.
2.2	Establish professional relationships with infants, children and adolescents, their families (when appropriate) and community that demonstrate the attitudes, professional behaviours and ethics appropriate for clinical paediatric practice, in relation to children, parents, health professionals, peers, others and self and respecting the confidentiality inherent in these relationships.
2.3	Deliver information to the child and adolescent and his/her family (as appropriate) in a humane manner, and in such a way that it is easily understood, encourages discussion and promotes the young person's and family's participation in decision-making keeping in mind the developmental evolution of young person's capacity to consent.
2.4	Gather information, negotiate a common agenda, and develop and interpret a treatment plan, while considering the influence of factors such as the infant's/ child's /adolescent's age and gender, and the family's and community's ethnicity, cultural and spiritual values, socioeconomic background, medical conditions, and communication challenges.

2.5	Demonstrate the importance of cooperation and communication among health professionals in the care of the infant, child and adolescent so as to maximize the benefits to patient care and outcomes, and minimize the risk of errors.

Collaborator

The medical graduate will be able to:

Objective	
3.1	Demonstrate an understanding of the role of others in providing optimal interdisciplinary care to infants, children, adolescents and their families in research and educational tasks.
3.2	Synthesize the data derived from the history, physical and laboratory assessments and formulate a problem-oriented approach to the infant's, child's or adolescent's presenting problems, in collaboration with the youth, family and members of the interdisciplinary team.
3.3	Participate in interdisciplinary team discussions, demonstrating the ability to accept, consider and respect the opinions of the youth, the family and other team members, while contributing an appropriate level of expertise to the care of infants, children and adolescents.

Leader

The medical graduate will be able to:

Objective	
4.1	Participate effectively in health care organizations, ranging from individual clinical practices to academic health sciences centres and the child health network, exerting a positive influence on clinical practice and policy-making in one's professional community.
4.2	Describe the governance, structure, financing, and operation of the health care system, its facilities and networks and how these influences patient care, research and educational activities at a local, provincial, regional, and national level.
4.3	Apply a broad base of information to the care of infants, children, adolescents and their families in ambulatory care, hospitals and other health care settings.
4.4	Demonstrate an awareness of the need for wise stewardship of available resources for child health care with a focus on preventive health care.
4.5	Participate actively in team building function by demonstrating the necessary attitudes, professional behaviours and ethics.
4.6	Apply population-based approaches to child health care and illness prevention as appropriate.

4.7	Participate in evaluation and outcome of patient care and educational programs.
4.8	Participate in innovative approaches to clinical child health care at an appropriate level of expertise.

Health Advocate

The medical graduate will be able to:

Objective	
5.1	Apply the determinants of health and principles of disease prevention and behaviour change to child health care responsibilities and broader patient care initiatives based on an understanding of the normal growth and development of infants, children and adolescents and their common health problems.
5.2	Be aware of diverse characteristics and needs of different cultural groups and specific populations, i.e., immigrants and minority or marginalized groups
5.3	Respect diversity, be willing to work through systems, such as child welfare, collaborate with other members of the health care team, and accept appropriate responsibility for the health of infants, children, adolescents and their families.
5.4	Participate at the appropriate level of expertise in community activities directed at improving health of infants, children, adolescents and their families, utilizing the best evidence, effective teamwork and communication skills.
5.5	Demonstrate an understanding of infants, children and adolescents and their families and apply that understanding to achieve a physician/ patient relationship that is likely to identify and implement individual health and disease management strategies on an individual basis.
5.6	Achieve a sufficient fund of knowledge and an ability to appraise the available knowledge critically so as to challenge the limitations of clinical orthodoxy or identify threats to population health and advocate for their amelioration in a reasoned manner.

Scholar

The medical graduate will be able to contribute to the following scholarly activities:

Objective	
6.1	*Research:* Develop an awareness of how research questions are formulated and how protocols are elaborated to address them. Understand the unique aspects of research with infants, children and adolescents and the ethical issues it raises.
6.2	*Education:*

a	Demonstrate the ability to engage in life-long, self-directed learning and critical inquiry.
b	Compare and contrast the diverse learning approaches of peers, patients and others, in order to interact and collaborate effectively.
c	Assist in teaching others and facilitating learning where appropriate
d	Understand the importance of being mentors to those less experienced members of the health care teams
6.3	*Creative Professional Activity:* The medical graduate will be able to describe the importance of, and contribute to professional innovations, creative excellence, and exemplary professional practice. The graduate will also demonstrate leadership potential by participating in the development of professional practices in child health, such as practice guidelines or health policy development, and participation in professional organizations at the appropriate level of expertise.

Professional

The medical graduate will be able to:

Objective	
7.1	Recognize and accept the need for self-care and personal development as necessary to fulfilling one's professional obligations and leadership role.
7.2	Demonstrate altruism, honesty and integrity and respect in all interactions with infants, children, adolescents and their families, colleagues, and others with whom physicians must interact in their professional lives.
7.3	Demonstrate compassionate treatment of infants, children and adolescents and their families and respect for their privacy and dignity and beliefs
7.4	Be reliable and responsible in fulfilling obligations.
7.5	Recognize and accept the limitations in his/her knowledge and clinical skills, and demonstrate a commitment to continuously improve his/her knowledge, ability and skills and leadership, always striving for excellence.
7.6	Describe and abide by the University/Faculty codes of professional conduct, and the relevant professional regulatory requirements concerning medical practice.
7.7	Describe the threats to medical professionalism posed by the conflicts of interest which can occur in the practice of medicine.
7.8	Demonstrate a sound grasp of the theories and principles governing ethical decision-making, the major ethical dilemmas in the care of infants, children and adolescents, and an approach

	to resolving these.
7.9	Demonstrates an understanding of the principles and practice of law as they apply to the practice of paediatrics.
7.10	Develop the capacity to recognize common medical errors, report them to the required bodies, and discuss them appropriately with infants, children and adolescents and their families.

Required resources

1. Sickkids/UofT Paeds **On-The-Go Handbook and Syllabus** – available on the Portal. The handbook is provided to students during course.

Recommended textbooks/learning resources

1. ***Nelson Textbook of Pediatrics** - **19th Edition**. Kliegman, Robert - W.B.Stanton, St Geme, Schor & Behrman – Elsevier/Saunders 2011.
2. ***Rudolph's Pediatrics – 22nd Edition.** Rudolph, Rudolph, Lister, First & Gershon. McGraw Hill Professional, 2011.

***** Both of the above textbooks have condensed soft-cover versions (Essentials)

3. **Pediatric Clinical Skills – 4th Edition.** Goldbloom, R.B. Philadelphia, PA: Saunders/Elsevier, 2011
4. **Red Book: 2012 Report of the Committee on Infectious Diseases – Pickering LK, ed., 29th Edition.** American Academy of Pediatrics, 2012.

thehub.utoronto.ca/pediatrics/	Educational resources to support the U of T curriculum
www.pupdoc.ca	Educational resources to support the PUPDOC Curriculum
www.pedsinreview.org	Pediatrics in review journal. Excellent review articles that are easy to understand
www.cps.ca	Canadian Paediatric Society website. Position statements of CPS on important topics. Access to CPS journal-"Paediatrics and Child Health. Information sheets for parents.
www.aap.org	Website of American Academy of Pediatrics
www.med-u.org.	Computer Assisted Learning in Pediatrics Cases (CLIPP). 32 comprehensive interactive cases that cover important core topics.
www.comsep.org	Website of Council on Medical School Education in Pediatrics. They have a video on their website on the pediatric physical exam under the "Multimedia Teaching Resources" section

www.pedscases.com	Free interactive website created for medical students by medical students. Provides an opportunity for active self-directed learning in Paediatrics.
www.aboutkidshealth.ca	Evidence-based, peer-reviewed information for parents regarding a wide variety of paediatric issues. Topics can be printed and distributed to families.
www.kidsnewtocanada.ca	*Caring for Kids New to Canada*. Co-editors Drs. Tony Barozzino of St. Michael's Hospital and Chuck Hui of the Children's Hospital of Eastern Ontario.

Core Clinical Rotation: Psychiatry (6 weeks)

Course Director	Course Administrator
Dr. Raed Hawa raed.hawa@uhn.ca	Tammy Mok undergrad.psych@utoronto.ca 416-979-6838

Site Directors/Assistants

Site	Director (Faculty)	Assistant
CAMH	Dr. Chloe Leon chloe.leon@camh.ca	Zach Fraser zach.fraser@camh.ca
MSH	Dr. Ellen Margolese ellen.margolese@sinaihealthsystem.ca	Jeanette Villapando jeanette.villapando@sinaihealthsystem.ca
OS (Ontario Shores)	Dr. Hoa Pham phamh@ontarioshores.ca	Marsha Bryan bryanma@ontarioshores.ca
SMH	Dr. Kien Dang dangk@smh.ca	Jeff Loudermilk loudermilkj@smh.ca
SHSC	Dr. Eileen LaCroix eileen.lacroix@sunnybrook.ca	Nancy Gribben nancy.gribben@sunnybrook.ca
THP	Dr. Ariel Shafro ariel.shafro@trilliumhealthpartners.ca	Jennifer Reid jennifer.reid@trilliumhealthpartners.ca

		Keith Leung keith.leung@trilliumhealthpartners.ca
UHN	Dr. Patricia Colton patricia.colton@uhn.ca	Tammy Cadue tammy.cadue@uhn.ca

Course overview

Centralized didactic teaching occurs on day 1 of week 1 of the rotation that is held at a central location on or near the University campus and presented to the students from all sites for each rotation. Interviewing patients and/or standardized patients with anxiety, mood, psychosis, cognitive, and substance disorders with focus on symptomatology, diagnosis, and basic treatment principles is an integral component of the course and is delivered at each site.

The basic clinical experience with direct patient care responsibility will take place in a variety of settings including inpatient units, ambulatory clinics, consultation liaison teams, emergency settings and psychotherapy/crisis clinics. Each clerk will be assigned a supervisor who will ensure that the clerk obtains the suitable clinical experiences necessary to fulfill the objectives. It is mandatory for clerks to keep up-to-date records through the Case Logs function on MedSIS to ensure clinical objectives are met.

All clerks will have exposure to psychiatric emergencies mostly by taking night and weekend on-call not exceeding 1 in 5, until 11 p.m.

Clinical experience with children and families will take place during three half-days (per rotation) at each Academy or in a child psychiatry setting under the direct supervision of a child psychiatrist.

The following seminars will be held weekly at each hospital site:

1. An Interviewing Skills seminar designed to meet the interviewing skills objectives through practice with feedback.
2. A Personality Disorders course generally consisting of sessions in which clerks have a chance to practice interviewing patients or standardized patients. The course introduces diagnostic and interviewing skills related to difficult patient interactions. Most sessions are conducted by residents in psychiatry.

NOTE: Students are responsible for covering all of the material taught centrally and available on Portal

(PowerPoint presenations, videotaped sessions), the locally delivered Personality Disorders course, the course syllabi with specific objectives, and the required textbook (see below).

Assessment

1. Global Evaluation Form (GEF), MiniACE/CBD – 40%

At mid rotation, each clerk will be given qualitative feedback regarding their progress to date in writing by their Primary Supervisors. At the end of the rotation, each clinical supervisor will also complete a standardized quantitative Global Evaluation through MedSIS for the Clerk he/she worked with. Clerks are also required to submit at least six Mini-ACE/CBD evaluation forms to their Primary Supervisors from six observed interviews they have had during their rotation. These forms are formative only, but collectively will contribute to the mark assigned on the Global Evaluation by the Primary Supervisor, completed online through MedSIS.

2. Clerkship Professionalism Evaluation Form – Credit/No Credit

Clerks are evaluated on their professionalism through MedSIS. The Primary Supervisor will complete standardized Professionalism form for the clerk with whom he/she worked. Lapses such as delinquency, missed call, and unexplained absences will be documented and sent to the MD Program office.

3. Narrative Reflective Competence – 10%

The Narrative Medicine assignment will be handed in to the original Primary Supervisor the day after the written/OSCE exams in week 6 so it can be marked and included in the final grade. It is worth 10% of the overall final grade, and it is a mandatory component of evaluation.

4. OSCE & Written Exam – 50%

In week 6, clerks will participate in a comprehensive examination that consists of a written exam (25%) and an Objective Structured Clinical Examination (OSCE) (25%).

Clerks must pass each of the OSCE, the written exam, and the clinical assessment (Global Evaluation). Clerks who fail the rotation (i.e. receive a global rating of 'Not Competent' on two OSCE stations or receive below 60% on either the OSCE or written exams or the Global Evaluation) will be presented to the Board of Examiners for consideration of remediation, which may include up to a four-week remediation rotation.

5. Case Log Requirements – Credit/No Credit

Students must log all requirements for the Psychiatry clerkship in MedSIS to obtain credit.

For details, including grading regulations, see the Psychiatry webpage on, the course website on the U of T portal (http://portal.utoronto.ca – registered users only), and the program policies related to examination and assessment (http://www.md.utoronto.ca/policies).

NB: In order to receive credit for Psychiatry, students must also complete the required evaluations of teachers and of the course, as specified in the course outline, in conformity with the *Principles and Expectations for Student Completion of Teacher and Course Evaluations in UME (PDF)*

Course objectives

GOALS: The Psychiatry Clerkship is designed to consolidate the knowledge, skills, and attitudes acquired in the Preclerkship and, relying heavily on clinical experience, develop clinical competence in approaching common and important presenting problems in psychiatry. The Psychiatry clerkship course follows the CanMEDS Guidelines through both didactic and clinical teaching during the six-week rotation.

A. General competencies

By the end of the Psychiatry clerkship, the clinical clerk will be able to:

Medical Expert

- Demonstrate the ability to assess and manage common psychiatric presentations, including assessment of suicidal and homicidal risk. (The relevant disorders are listed below under 'Educational Objectives/Problem-based')
- Conduct a focused, relevant, empathic, and accurate clinical history. (Further details related to this are found below under 'Educational Core Objectives/Skills')
- Conduct a relevant mental status examination including cognitive testing
- Establish a working differential diagnosis
- Outline a management plan that incorporates biological, psychological, and social investigations and interventions where appropriate

Communicator

- Communicate effectively and empathetically with patients and their families
- Demonstrate a thorough and clear documentation and charting, with concise recording of pertinent findings
- Demonstrate the ability to communicate and educate patients with mental illness and their families
- Demonstrate the ability to present a clinical case in a clear, concise, and complete manner

Collaborator

- Establish and maintain effective working relationships with colleagues and other health care professionals
- Discuss the roles of the various providers of care and the role of allied health professionals
- Demonstrate knowledge of community resources available to help patients with mental illness and their families if outpatient supports are needed
- Respect the role of the patient's primary care physician by soliciting input in the assessment, in the development of the care plan, and in follow-up

Leader

- Demonstrate appropriate and cost-effective use of investigations and treatments.
- Develop organizational skills and efficiency in managing patients
- Develop an understanding of the factors contributing to resource issues in the care of patients with mental illness

Health Advocate

- Demonstrate an awareness of the underlying psychosocial and socioeconomic problems that may precipitate a mental health contact
- Discuss the role of the psychiatrist in the health care system and how it relates to other hospital and community health services
- Demonstrate an understanding of legal and ethical issues surrounding the care of patients with mental illness

Scholar

- Access and critically appraise the literature relevant to psychiatric care, management, and treatment
- Understand the many unique learning and teaching opportunities available in Psychiatry

Professional

- Be respectful of interactions with patients and their families
- Recognize the legal and ethical issues inherent in interactions with patients
- Appreciate the cultural and social stigma towards psychiatric patients
- Demonstrate professionalism as per professionalism form
- Respect confidentiality in emergency and non-emergency settings
- Be aware of deficiencies in knowledge or skills and implement the necessary steps to improve in these areas

B. EDUCATIONAL CORE OBJECTIVES:

I. Skills:

By the end of the Psychiatry clerkship rotation, the clinical clerk should be able to demonstrate basic proficiency in the following skills. Competencies to complete these skills may be acquired during clinical encounters, core lectures, interviewing skills seminar, personality disorders sessions, being on call, or on other rotations.

Interviewing Skills:

As the psychiatric interview is the foremost diagnostic and therapeutic tool, special emphasis will be placed on this skill. A clerk should be able to:

1. Assess the danger of a clinical situation and respond to reduce the danger to an acceptable level
2. Understand and use a variety of questioning techniques to elicit information (open-ended, closed ended) in an interview
3. Practice awareness of one's own emotional responses to patients to further one's understanding of a patient
4. Conduct an interview with a child and a family with the above goals
5. Conduct a brief focused interview in an interval of 10-15 minutes, characteristic of an assessment in family practice

Psychiatric Skills:

1. Assessment of capacity
2. Assessment of violence/agitation
3. Assessment of suicide risk
4. Legal certification forms
5. Mini mental status examination – MMSE and/or MOCA

II. Problem-based

By the end of the Psychiatry clerkship rotation, the clinical clerk should be able to demonstrate an approach to patients presenting with the following problems (including differential diagnosis, investigations and initial management):

- Mood Disorders
- Psychotic Disorders
- Personality Disorders
- Anxiety Disorders
- Neurocognitive Disorders
- Substance Use Disorders

- Eating Disorders
- Somatic Symptom Disorders
- Suicidal and/or homicidal risk
- Consideration for psychotherapy treatment
- Consideration for psychopharmacological treatment

Textbooks/learning resources

Course Textbook:

- Black and Andreasen, Introductory Textbook of Psychiatry – 6th Edition, 2014 (chapters 1-3, 5-9, 15-17, 20-21)

Suggested Readings:

- Diagnostic and Statistical Manual of Mental Disorders, 5th Edition, American Psychiatric Association, 2013.
- Zimmerman, Interview Guide for Evaluating DSM-5 Psychiatric Disorders and the Mental Status Examination, Psych Products Press, 2013

Core Clinical Rotation: Surgery (8 weeks)

Course Director	Course Administrator
Dr. George Christakis george.christakis@sunnybrook.ca	Shibu Thomas shibu.thomas@utoronto.ca 416-978-6431

Site Directors/Assistants

Site	Director (Faculty)	Assistant
UHN	Dr. Fred Gentili fred.gentili@uhn.ca	Liz Doherty elizabeth.doherty@uhn.ca
SMH	Dr. Robert Stewart rob.stewart@utoronto.ca	Michelle Dominey domineym@smh.ca
SHSC	Dr. Fuad Moussa fuad.moussa@sunnybrook.ca	Ashley Rosen rosenas@smh.ca
MSH	Dr. Helen MacRae hmacrae@mtsinai.on.ca	Firdeza Mustafovski-Vujaklija fmustafovski@mtsinai.on.ca

Clerkship courses – YEAR 3

HSC	Dr. Walid Farhat walid.farhat@sickkids.ca	Lisa Abreu lisa.abreu@sickkids.ca
HRRH	Dr. John Hagen jhagen@hrrh.on.ca	Angella Chambers achambers@hrrh.on.ca
SJHC	Dr. Christopher Compeau compec@stjoe.on.ca	Chelsea Houde Choude@stjoestoronto.ca
Michael Garron Hospital	Dr. Paul Bernick (Med. Director) bernickp@sympatico.ca	Joanne Mount j.mount@utoronto.ca
WCH	Dr. Fuad Moussa fuad.moussa@sunnybrook.ca	Ashley Rosen rosenas@smh.ca
THP – CVH	Dr. Abdollah Behzadi abdollah.behzadi@trilliumhealthpartners.ca	Yvonne McVeigh yvonne.mcveigh@trilliumhealthpartners.ca
THP – MH	Dr. Christiane Werneck chriswerneck@gmail.com	Yvonne McVeigh yvonne.mcveigh@trilliumhealthpartners.ca

The Surgical Clerkship is an eight-week rotation that is sub-divided into four sections.

1. All students commence the rotation with a one-week centralized interactive case-based 'flipped classroom' PBL-type sessions and surgical skills program called "Prelude to Surgery." This takes place in the University of Toronto Surgical Skills Centre at Mount Sinai Hospital. It provides an excellent opportunity for orientation and introduction to fundamental skills and surgical topics.
2. Following Prelude to Surgery, students then perform two three-week sub-rotations: One of the three-week sub-rotations must be in General Surgery and may occur in the beginning of the rotation or at the end of the rotation. Students have input into their choice of sub-rotation specialty and the site Surgical Education offices always do their best to accommodate.
3. General Surgery is the lone mandatory sub-rotation.
4. In the last week of the eight week Clerkship, the student will be required to attend the Central Seminars, examination preparation and debriefing sessions as well as perform any additional administrative work such as setting up evaluation meetings with their preceptors, etc.
5. The oral and written examinations for this clerkship will occur on the Thursday and Friday of the eighth week.

Each student is assigned to a surgeon preceptor for each of their two sub-rotations. The student is expected to contribute to the admissions and daily patient care and to attend the operating room and the clinic /office of their preceptor or team.

On Call: The on-call schedule is one night in four for students. This provides the opportunity to see patients in the ER as well as taking call to the ward and OR, where appropriate. An on-call formative feedback card will need to be completed for every call shift that the student performs. These completed forms will need to be submitted by the student to the Surgery clerkship office upon completion of the Surgery clerkship rotation. Please see the complete Department of Surgery Call Policy on the Surgical Clerkship website on the Portal (https://portal.utoronto.ca)

Assessment

- NBME Shelf Examination – multiple-choice format (33.3%)
- Performance-based Structured Oral Examination – 4 stations (33.3%)
- Clinical performance evaluation, based on an assessment of the student's clinical work during the rotation (33.3%)
- Professionalism evaluation (Credit/No Credit)
- Case Log requirements (Credit/No Credit)

Note: A score of greater than 60% on each of the Clinical Performance Evaluation, the Structured Oral Exam, and the NBME Shelf Exam must be achieved in order to pass the rotation. Students must achieve credit in each component of the assessment in order to achieve credit in the course.

For details, including grading regulations, see the course website on the U of T portal (http://portal.utoronto.ca – registered users only), and the program policies related to examination and assessment (http://www.md.utoronto.ca/policies).

NB: In order to receive credit for Surgery, students must also complete the required evaluations of teachers and of the course, as specified in the course outline, in conformity with the *Principles and Expectations for Student Completion of Teacher and Course Evaluations in UME (PDF)*.

Course objectives

At the conclusion of the Surgical Clerkship, students should be able to:

Medical Expert

- Describe the relevant aspects of *common and/or life-threatening surgical illnesses*
- Provide an approach to the diagnosis of the *major presenting problems* encountered in surgery
- Understand appropriate use and interpretation of *diagnostic tests* relevant to surgical decision-making
- Make use of evidence-based medicine (EBM) so they can better diagnose and manage patient problems
- Make use of the basic science principles relevant to surgery, as learned during the Preclerkship and expanded on during Clerkship, in order to more rationally diagnose and manage the various factors contributing to the patient's illness
- Describe the properties of *medical and surgical* therapies, in terms of their indications, contraindications, mechanisms of action, side effects, and monitoring

Communicator

- Communicate effectively and empathetically with patients and their families
- Demonstrate thorough and clear documentation and charting, with concise recording of pertinent positive and negative findings
- Demonstrate the ability to obtain informed consent for surgical procedures
- Demonstrate the ability to council and educate patients and families in the inpatient as well as outpatient environments
- Provide clear discharge instructions for patients and ensure appropriate follow-up care

Collaborator

- Establish and maintain effective working relationships with colleagues and other health care professionals including nurses, physiotherapists, social workers, and other allied health care workers
- Demonstrate an understanding of the concept of triage and prioritization of care in management of multiple patients simultaneously
- Demonstrate knowledge of community resources available to the surgical patients on an outpatient basis
- Understand the critical role of the patient's primary care physician

Leader

- Demonstrate appropriate and cost-effective use of investigations including medical imaging and laboratory studies
- Develop an understanding of the factors contributing to resource issues in the operating room and outpatient environments

Health Advocate

- Demonstrate an awareness of the underlying psychosocial and socioeconomic problems that may complicate discharge from hospital following elective or emergent surgery
- Discuss the role of the surgeon in the health care system and how it relates to other hospital and community health services
- Demonstrate an understanding of legal and ethical issues surrounding surgical care.
- Identify opportunities for primary prevention in the outpatient environment and council patients accordingly

Scholar

- Access and critically appraise the literature relevant to surgical care
- Understand the many unique learning and teaching opportunities available on the outpatient and inpatient surgical service

Professional

- Recognize and accept his or her limitations and know when to ask for help
- Protect information provided by or about patients, keeping it confidential, and divulge it only with the patient's permission except when otherwise required by law
- Be reliable and responsible in fulfilling obligations
- Recognize situations where common medical errors may occur in the outpatient and inpatient environment

B. Educational core objectives

By the conclusion of the Surgical clerkship, students are expected to have had the following experiences:

Encounters

1. Acute abdomen
2. Post-op fever
3. Post-op electrolyte management
4. Post-op urine output management
5. Trauma
6. Tumour/ malignancy
7. Wound care

Procedures

1. Casting/ splinting (perform individually)
2. Chest tube insertion (observe procedure)
3. Laparotomy (perform with assistance/ assist)
4. Suturing/ knot tying (perform with assistance/ assist)

5. Wound closure/ dressing (perform with assistance/ assist)

Portfolio

Director	Administrator
Dr. Nirit Bernhard portfolio.director@utoronto.ca Dr. Susanna Talarico (Associate Course Director) susanna.talarico@sickkids.ca	Melissa Casco portfolio.ume@utoronto.ca 416-978-7327

Course overview

Portfolio in third year, PFL 310Y, has been designed to facilitate students' professional development through guided reflection, focused on all their activities in the clinical phase of the student journey and how they relate to the six 'Intrinsic' (i.e. non-Medical Expert) CanMEDS roles of Collaborator, Communicator, Leader, Health Advocate, Scholar, and Professional.

This course has two main components: the 'Process' component and the 'Portfolio Submission' component.

Process Component

The Process Component of the course consists of one online introductory session, and seven mandatory small-group meetings throughout the academic year. The students are given protected time away from their rotations to attend the small-group meetings. Students will meet in small groups of up to seven or eight, with one resident (Junior Academy Scholar) and one faculty member (Academy Scholar) to support them in reflecting on their experiences in the clinical setting, and the resulting effects on their professional development.

Each meeting will have a theme. The first meeting develops the students' ability to tell a story and decide upon its significance for the CanMEDS roles. The remaining meetings are each devoted to one of the six CanMEDS roles described above. For each meeting, students must bring a story of themselves in that role, which they present to their peers, followed by appreciative feedback and discussion. The purpose of the discussion is to help each student develop their reflections upon the story they told.

Small-group meetings take place in the Academies, with the capability for a limited number of students to connect from remote sites either by telephone or web connection when on a distant rotation. Students are expected to attend all meetings. Students unable to attend a meeting are expected to notify their Academy Scholar, the Course Director AND submit a Petition for Consideration for missing a mandatory academic event.

For the meeting schedule, please refer to the Portfolio course handbook or to the course portal.

Portfolio Submission Component

This course takes the view that committing a reflection to written or other recorded form encourages it to be more complete and critical, and enhances its meaning to the student. For this reason, students must develop their stories into reflections that express the meaning of the story to the student, and how they integrate their CanMEDS roles into their professional identity.

By the end of the course, students will have submitted all six reflections. Each reflection is centered on one of the CanMEDS roles discussed. Creation of these six submissions constitutes the development of the student's reflections to their greatest extent, in terms of the student's analysis of the personal meaning of the experience described, and their personalized understanding of the CanMEDS role in light of that experience. Students submit their reflections throughout the year for feedback. If they are deemed satisfactory (see Assessment, below), then no further is required. If improvements are requested, the student must resubmit the reflection.

For the submission deadlines, please refer to the Portfolio course handbook or to the course portal.

Assessment

Students are assessed both for the Process Component and for the Portfolio Submission Component. Students must pass each component in order to achieve Credit for the entire Course. Each component is considered equal in importance.

Process Component

Students will be assessed by their Academy Scholar after each of the group meetings. A simple assessment rubric will provide feedback on students' preparedness, story presentation, attentiveness to their colleagues, and feedback on others' stories. Students must be rated as 'Adequate' or 'Superior' on all four dimensions, in at least five of the seven meetings, in order to pass the Process Component. Feedback

on how to improve will be given for any areas marked 'Insufficient'. Achievement of a pass on the Process Component will comprise 50% of the student's standing for the entire course.

Portfolio Submission Component

Each of the six reflections will be submitted by the submission deadline. The reflections will be assessed anonymously by a different Academy Scholar and Junior Academy Scholar from those in the student's Portfolio Group.

Satisfactory performance on each Portfolio reflection requires:

1. A description of the student's personal involvement with the role, based upon a real clinical experience;

AND

2. Evidence of reflection on the meaning of the experience to the student;

AND

3. Evidence of a "personalized" integration of the CanMEDS role in the student's narrative.

In order to achieve a pass on the Portfolio Submission Component, students must submit a total of six Portfolio reflections, and at least five of the six reflections must be rated Satisfactory.

Students receiving 'Unsatisfactory' on any of their reflections will be able to improve their standing by acting on the feedback received, and showing their Academy Scholar that they have done so.

Achievement of a pass on the Portfolio Submission Component will comprise 50% of the student's standing for the entire course.

For more information on Assessment, please refer to the Portfolio course handbook. For grading regulations, see the course website on the U of T portal (http://portal.utoronto.ca – registered users only), and the program policies related to examination and assessment (http://www.md.utoronto.ca/policies).

NB: In order to receive credit for Portfolio year 3, students must also complete the required evaluations of teachers and of the course, as specified in the course outline, in conformity with the *Principles and Expectations for Student Completion of Teacher and Course Evaluations in UME (PDF)*.

Course objectives

GOAL: The goal of the course is to promote greater professional self-awareness, as students enter the clinical world, specifically related to the six 'Intrinsic' (i.e. non-Medical Expert) CanMEDS roles of Collaborator, Communicator, Leader, Health Advocate, Scholar, and Professional, using the specific skill of reflection.

A. General objectives:

At the end of this course, each student will:

- Be able to reflect on the personal meaning of a clinical experience, in terms of how it illustrates the student's developing professional identity;
- Demonstrate understanding of the CanMEDS roles, and how they relate to each other in clinical examples;
- Be able to describe their own personalized development in each of the CanMEDS roles, as illustrated by their own experiences;
- Be able to create reflective writing or other materials to demonstrate and document their professional development in the CanMEDS roles to faculty and peers;
- Provide appreciative and developmental feedback to peers on their reflections;
- Be able to analyze his/her own learning needs as they look ahead to further training, e.g. residency.

B. Competencies:

The student will:

Professional

- Display respectful and supportive behaviour towards the stories, and feelings, of their classmates within the Portfolio Group meetings
- Safeguard the confidentiality of all discussions within Portfolio Groups, meaning that no information divulged there may be discussed or disclosed outside the meeting, except when creating a submission, which shall itself be confidential
- Create reflective writing that demonstrates respect for the privacy of patients, colleagues, and other individuals, while still telling an authentic story that is personally meaningful to the student
- Be able to identify clinical experiences which illustrate aspects of professional behaviour, whether through observed lapses or through positive role modelling
- Reflect on the impact of these experiences on the student's understanding of himself/herself as a Professional

Communicator

- Be able to convey a story of himself/herself in a clinical situation, related to the CanMEDS Role under discussion, clearly and with appropriate emphasis on its meaning
- Be able to provide appreciative feedback to peers about their stories within the Portfolio Groups
- Be able to develop a written reflection on their story which shows evidence of the personal meaning of the experience and its relation to one or more of the CanMEDS roles
- Be able to identify clinical experiences in which communication was crucial to a positive or adverse outcome for a patient or team
- Reflect on the impact of these experiences on the student's understanding of himself/herself in the role of Communicator

Collaborator

- Work within his/her Portfolio group to enable the participation of all members, and to enhance the climate for learning for the entire group
- Be able to identify clinical experiences in which effective collaboration between members of a health care team was either instrumental in achieving a good patient outcome, or was deficient and contributed to a negative patient outcome
- Reflect on the impact of these experiences on the student's understanding of himself/herself in the role of Collaborator

Health Advocate

- Identify situations where patient outcomes may have been less than optimal as a result of inequities and/or system issues, or where advocacy prevented such a suboptimal outcome
- Reflect upon his/her personal role in advocating for patient care, including impact upon self, patients and their significant others, as well as other members of the interprofessional and health care teams

Leader

- Critique aspects of personal practice, interprofessional teamwork or system change, based upon specific clinical experiences related to the Leader role
- Reflect on how he/she has developed as a Leader in light of these experiences

Scholar

- Develop and use reflection skills in the analysis of the personal meaning of the stories described, while creating their Portfolio submissions
- Act on feedback to improve their reflections as required
- Identify a clinical example where aspects of self-directed learning, teaching others, appraising evidence, or developing new knowledge were important for improving practice or care

- Reflect on how these clinical experiences have influenced the student's conception of himself/herself as a Scholar

Textbooks/learning resources

There are no required reading materials for this course. Exemplars of satisfactory reflections will be provided to students. Students may find the following recommended reading helpful in developing their reflections:

Aronson L. (2011). Twelve tips for teaching reflection at all levels of medical education. Med Teach; 33: 200-205

Integrated OSCE (iOSCE)

Director	Chief Examiner	Administrator
Dr. Stacey Bernstein stacey.bernstein@sickkids.ca	Dr. Brian Simmons brian.simmons@utoronto.ca	Samantha Fortunato samantha.fortunato@utoronto.ca 416-946-5208

Course description

The integrated OSCE is a transcripted course and constitutes a summative assessment all components of which must be passed which is required for graduation and has the following format:

1. Interim iOSCE: held after first 24 weeks of year 3 Clerkship: 6 (six) OSCE stations linked to the curriculum covered to date – first 24 week block of:
   - Family Medicine / Dermatology / Obstetrics & Gynaecology / Paediatrics / Psychiatry

   or
   - Medicine / Surgery / Otolaryngology / Ophthalmology / Anesthesia / Emergency Medicine.

2. Final iOSCE: after 48 weeks of year 3 Clerkship: 10 (ten) OSCE stations – 6 (six) stations linked to the previous 24 weeks of curriculum and 4 (four) integrated stations reflecting the entire third-year curriculum.
   - Medicine/Surgery/Otolaryngology/Ophthalmology/Anesthesia/Emergency Medicine

   or
   - Family Medicine/Dermatology/Obstetrics & Gynaecology/ Paediatrics /Psychiatry

Course objectives

The goals of the integrated Objective Structured Clinical Examination (iOSCE) are to:

1. Assess the medical students knowledge base in a performance setting (the OSCE) on the 48 weeks (each 24 week block) of third year clerkship.
2. Assess the medical student's progress towards integrating the third year clerkship and application of knowledge as medical graduate ready for postgraduate training.
3. To identify students in academic difficulty not related to (for example) communication, collaboration and professionalism.

Assessment

a. Overview of Assessment

Students will be assessed according to the following CanMEDS competencies:

Medical Expert

- History taking and data collection: acquires chronologic, medically logical description of pertinent events; acquires information in sufficient breadth and depth to permit clear definition of patient's problem(s)
- Physical examination: elicits physical findings in an efficient logical sequence and demonstrates appropriate technique, sensitive to patient's comfort and modesty, explains actions to the patient
- Information synthesis and problem formulation: organizes pertinent data in a logical manner and synthesizes the data into an integrated concept that defines the problem; discriminates important from unimportant information and reaches a reasonable diagnosis based on sound clinical knowledge
- Diagnostic and management plan: able to generate diagnostic and therapeutic management plan

Collaborator

- Allied health professionals: understands and utilizes the expertise of other health care professionals

Communicator

- Counselling: explains rationale for test/treatment approach; counsels regarding management; considers risks and benefits; establishes rapport
- Verbal expression: demonstrates fluency in verbal communications e.g. grammar, vocabulary, tone, volume
- Non-verbal expression: demonstrates responsiveness; demonstrates appropriate non-verbal communications e.g. eye contact, gesture, posture, use of silence

Professional

- Responds to patient's needs in a timely and respectful manner, demonstrating attitudes and professional behaviours appropriate to the clinical situation e.g. inappropriate draping, inappropriate touching, abusive communication

b. Details of Assessment:

[Interim iOSCE]

- Constitutes a summative assessment

6 (six) OSCE stations linked to the curriculum covered to date – first 24 week block

- Passing grade (meets expectations) 60%
- If not reaching the minimal passing grade, students will be offered extra work to help improve performance on final iOSCE
- The score on this examination will be a total of 20% of the overall iOSCE mark

[Final iOSCE]

- Constitutes a summative assessment
- 10 (ten) OSCE stations – 6 (six) stations linked to the second 24 week block of the curriculum and four integrated station reflecting the entire third-year curriculum.
- Passing grade (meets expectations) 60%
- The scores on this examination will be a total of 80% of the overall iOSCE mark

[Remedial iOSCE]

- Students not reaching a total pass of 60% on the iOSCE (interim + final) will be offered remediation and will be required to perform to the required standard on a remedial examination to be held after the completion of year 3 and prior to the end of year 4

[Final standing]

- Marks from both the interim and final iOSCE will be used to calculate the final iOSCE grade

For details, including grading regulations, see the course website on the U of T portal (http://portal.utoronto.ca – registered users only), and the program policies related to examination and assessment (http://www.md.utoronto.ca/policies).

Electives

Director	Administrator (Electives Officer)
Dr. Seetha Radhakrishnan seetha.radhakrishnan@sickkids.ca	Rockiel Austin electives.uoft@utoronto.ca 416-978-0416

Course objectives

The goal of the Electives program in the MD Program is to provide students with the opportunity to explore career possibilities, to gain experience in aspects of medicine beyond the core curriculum, and to study subjects in greater depth. Knowledge, skills, and attitudes are further developed in a clinical context selected by students.

Fourth-year students are expected to set up their individualized Elective experiences at the University of Toronto or at other recognized sites of practice, such as other medical schools across Canada as well as in northern and non-urban practices. Students may also undertake Global Health Electives in accordance with University of Toronto regulations.

The student and the supervisor are responsible for ensuring a clear, mutual understanding of the learning activities designed to meet the objectives of the Elective.

By the end of the Electives block, the student should have a greater depth of knowledge and appreciation for chosen specialties and the ways in which these specialties tie into their future career choices.

Course overview

The Elective course spans a total of 15 weeks in duration, of which 13 weeks count towards curricular time and two weeks are designated as vacation. The Electives Office strongly encourages students to take the allotted vacation time during their Electives block. However, should a student choose to pursue 14 or 15 weeks of Elective time, they are required to register these additional weeks.

The minimum number of weeks for each Elective is two. One week electives will be considered in specific circumstances, proposals will be reviewed by the Electives Director according to established guidelines.

There is no formal maximum number of weeks for an Elective; however an Elective greater than six weeks in duration would need to be discussed with the Electives Director.

In accordance with the AFMC guidelines for Electives, students are expected to complete Elective experiences in a minimum of three of the CaRMS first-level entry residency programs. The requirement for three disciplines may be achieved through any combination of Electives and the selective components of the Transition to Residency course.

For more information on CaRMS first-level entry programs, please visit the following site: https://www.carms.ca.

Assessment

Students are evaluated by their supervisors in each Elective using the Clerkship Clinical Evaluation and Professionalism Evaluation forms. Students who receive evaluations of Unsatisfactory or Below Expectations will be required to meet with the Electives Director and may be required to do extra work or remediation.

Failure to meet the professionalism standards may result in failure of the Elective.

For details, including grading regulations, see the course website on the U of T portal (http://portal.utoronto.ca – registered users only), and the program policies related to examination and assessment (http://www.md.utoronto.ca/policies).

Transition Course: Transition to Residency (TTR)

Director	Administrator
Dr. Seetha Radhakrishnan (Co-Director – Selectives) Seetha.radhakrishnan@sickkids.ca Dr. Tatiana Freire-Lizama (Co-Director- Campus-Based Teaching) Freire-LizamaT@smh.ca	Ezhil Mohanraj ttr.ume@utoronto.ca 416-978-2763

Clerkship courses – YEAR 4

Course overview

This course consists of the final 14 weeks of the MD training program, and is designed to bring together and build upon many of the concepts students have learned about functioning as doctors. The course has two main themes:

1. Understanding the health care needs individual members of diverse groups within the Canadian population, and
2. Learning to use the health care system to meet those needs.

There are three components to this course.

1. The two Campus Weeks, both in January, contain both independent and classroom based learning activities about concepts such as complex care, poverty, health of Indigenous peoples, medical-legal and licensure issues, complementary medicine, fitness to drive, and a number of other topics. These topics are meant to build upon students' basic knowledge of clinical practice from their Core clerkship rotations.

2. The Selectives are three clinical placements over eight weeks, and promote workplace-based learning, where students have increased (graded) responsibility under supervision. They allow the students to bring together many different areas of knowledge and skill in patient care, as they get ready for the increased responsibility of their PGY1 programs. Selectives will also serve as a resource for students to complete specific self-directed learning activities for course credit, in addition to an evaluation performed by their supervisor(s). Students must do at least one of the Selectives in a community setting, and at least one in either a Department of Medicine or Department of Surgery-sponsored selective. It is possible that a single Selective can satisfy both requirements. Students may use two of their Selectives to satisfy the graduation requirement for 3 CaRMS direct-entry electives in their program.

3. The Fusion period will bring the students back together for review of previously learned clinical material in preparation for the MCCQE Part 1.

Assessment

Students MUST PASS all of the four components below. While the four components are weighted, as shown below, for the purpose of calculating overall course score, and the minimum course score to pass is 60%, students cannot compensate for poor performance on one component by better performance on another.

1. **Selectives** (weight: 40%)

   In order to pass the Selectives,

   - Students must be successful in all three professionalism forms

   AND

   - Students must at least achieve a rating of MEETS EXPECTATIONS on all elements of all three clinical performance evaluation forms. (Items scored any lower will be scrutinized by the course director, and may lead to extra work.)

   AND

   - The three Selectives forms will be weighted according to the number of weeks for each Selective, and their scores averaged. The minimum average score to pass is 60%

2. **Health Equity Assignment** (weight: 25%)
   - The minimum score to pass is 60%.
3. **Health Systems Assignment** (weight: 25%)
   - The minimum score to pass is 60%.
4. **Campus Weeks Quizzes and Case Assignments** (weight: 10%)
   - Students must take all end-of-day quizzes in both Campus Weeks. However, the scores in the quizzes are formative and will not count towards the mark in the course.
   - The score for the case assignment component is calculated as a simple average of all the case assignment scores. The minimum score to pass the case assignments is 60%.

For details, including grading regulations, see the course website on the U of T portal (http://portal.utoronto.ca – registered users only), and the program policies related to examination and assessment (http://www.md.utoronto.ca/policies).

NB: In order to receive credit for Transition to Residency, students must also complete the required evaluations of teachers and of the course, as specified in the course outline, in conformity with the *Principles and Expectations for Student Completion of Teacher and Course Evaluations in UME (PDF)*.

Course objectives

At the end of the Transition to Residency course, students will be able to:

Medical Expert

- Describe and recognize the health issues experienced by the following groups of people:
  - Indigenous peoples of Canada
  - People with disabilities

  - People with occupational injury and disease
  - People from the LGBT community
  - People newly arrived in Canada (Immigrants and Refugees)
  - Elderly people
  - People living with addictions
  - People at end of life
  - People living in poverty
  - People requiring complex community care
  - Medical students and residents
- Describe commonly used herbal medications, their indications, efficacy, complications, and potential interactions with prescribed medications
- Describe the efficacy and use of homeopathy, acupuncture, naturopathy, and Mindfulness Based Stress Reduction alongside standard allopathic practice
- Identify common conditions affecting driving privileges, and describe the measures necessary to assess patients' ability to drive who have these conditions
- Develop strategies for patients at end of life to intervene with appropriate palliative care
- Employ strategies to maintain their own health and wellness as they move into the world of postgraduate training.

Communicator

- Describe an approach to communication with members of Indigenous communities about health care issues
- Use a strategy to inquire about patients' use of non-standard treatments
- Employ a strategy to communicate both with providers and with patients about medical errors and associated harms
- Understand the communication needs of patients with physical disadvantages
- Demonstrate an approach to interviewing patients with various types of addictions
- Use an approach to interviewing patients with a variety of gender orientations
- Demonstrate an approach to communicating with patients about loss of driving privileges
- Demonstrate an approach to communication with patients and families at the end of life
- Understand an approach to communicating sensitively and appropriately with people who have varying culturally based understandings of health, illness, and health care

Collaborator

- Discuss an approach to incorporating the recommendations of alternative or traditional practitioners into the care of their patients

- Describe the relationship between front line practitioners and public health professionals in the identification and management of emerging public health problems (eg. exposures, epidemics)
- Practice effective interprofessional communication in response to, and in prevention of, medical error
- Incorporate the recommendations of rehabilitation professionals into the care of patients with physical disabilities
- Use the skills of a broad range of health care practitioners to improve the care of patients at end of life
- Employ best practices in transferring information between physicians, and with other professionals, at times of transfer of care, to maximize patient safety
- Understand and demonstrate an approach to interprofessional conflict over patient care issues
- Use the principles of negotiation in leadership and cooperative work with others

Health Advocate

- Identify the specific needs of populations within their practices, and the varying needs of individuals within those populations
- Connect people to resources according to their needs, taking into account cultural, social, and personal preferences, and local factors influencing feasibility
- Demonstrate how they apply disease prevention principles in everyday clinical practice
- Demonstrate the appropriate use of government reports and forms to improve patients' health, safety, and access to legally entitled benefits
- Address the barriers to care of the elderly
- Engage in practices within their institutional environment to improve patient safety
- Demonstrate the principles of physician advocacy specifically for patients of low socioeconomic status
- Create a critical analysis of a real life health equity issue, and create recommendations for change

Leader

- Engage in constructive management with other professionals towards optimizing the complex system they work in
- Demonstrate an approach to efficiency in diverse clinical settings
- Understand the issues involved in managing the health human resources of Ontario
- Show critical analysis of a real life health systems issue, and create recommendations for change
- Show awareness of how management of personal time and stress can influence personal and professional well-being

Scholar

- Describe the idea of 'evidence' as it may or may not apply to traditional or alternative health care practices

- Describe how to use the published and 'grey' literature to understand emerging public health scenarios and problems
- Describe an approach to continuous self-guided learning while in practice

Professional

- Describe their legal and professional obligations with regards to reporting patients with conditions impacting their ability to drive
- Describe their legal and professional obligations with regards to aiding patients entitled to financial support as a result of workplace or other injury
- Describe the common medical-legal issues which are seen in residency, including best practices to avoid medical-legal difficulty
- Demonstrate professional behaviour in all health care environments, with regard to comportment, responsibility for completing tasks assigned, reporting errors and omissions, due regard for patients' and colleagues' well being, and other aspects of professionalism
- Describe an approach to the balancing of professional obligations and personal wellness in maintaining a sustainable work life in residency

Learning materials

Required and recommended learning materials will be provided to students throughout the course.

Portfolio

Director	Administrator
Dr. Nirit Bernhard portfolio.director@utoronto.ca Dr. Susanna Talarico (Associate Course Director) susanna.talarico@sickkids.ca	Melissa Casco portfolio.ume@utoronto.ca 416-978-7327

Course overview

Portfolio in fourth year, PFL 410Y, takes the introductory experiences of the third-year Portfolio Course and builds upon them to help students assess, discuss, and reflect on their overall evolution into newly graduating physicians.

This course has two main components: the 'Process' component and the 'Portfolio Submission' component.

Process Component

The Process Component of the course consists of three mandatory small group meetings scheduled around other organized central teaching during the academic year. Students will meet in small groups of up to seven or eight, with one resident (Junior Academy Scholar) and one faculty member (Academy Scholar) to support them in reflecting on their experiences in the clinical setting, and the resulting effects on their professional development. Students will continue with the same group of peers that they worked with in third year, and for the most part will work with the same Academy Scholars.

Each of the three meetings will have a theme. Students are asked to prepare for the meetings by developing a story of themselves in a clinical situation, which depicts the theme of the meeting. Small-group meetings will take place in the Academies. Students are expected to attend all meetings. Students unable to attend a meeting are expected to notify their Academy Scholar, the Course Director AND submit a Petition for Consideration for missing a mandatory academic event.

For the meeting schedule, please refer to the Portfolio course handbook or to the course portal.

Portfolio Submission Component

This course takes the view that committing a reflection to written or other recorded form encourages it to be more complete and critical, and enhances its meaning for the student.

By the end of the course, students will have submitted three reflections. Each reflection is centered on one of the meeting themes discussed. Creation of these three submissions constitutes the development of the student's reflections to their greatest extent, in terms of the student's analysis of the personal meaning of the experience described, and their personalized understanding of their evolving professional role in light of that experience. Students will submit their reflections throughout the year for feedback. If they are deemed satisfactory (see Assessment below) then no further work is required. If improvements are requested, the student must resubmit the reflection.

The Portfolio Reflection themes are as follows:

First theme: "Where I Have Been"
Second theme: "The Physician I aspire to be"
Final theme: "Where I am Now"

For the submission deadlines, please refer to the Portfolio course handbook or to the course portal.

Assessment

Students are assessed both for the Process Component and for the Portfolio Submission Component. Students must pass each component in order to achieve credit for the entire course. Each component is considered equal in importance.

Process Component

Students will be assessed by their Academy Scholar after each of the group meetings. A simple assessment rubric will provide feedback on students' preparedness, story presentation, attentiveness to their colleagues, and feedback on others' stories. Students must be rated as 'Adequate' or 'Superior' on all four dimensions, in at least two of the three meetings, in order to pass the Process Component. Feedback on how to improve will be given for any areas marked 'Insufficient'. Achievement of a pass on the Process Component will have equal status with their result in the Portfolio Submission component.

Portfolio Submission Component

Each of the 3 reflections will be submitted by the submission deadline. The reflections will be assessed anonymously by a different Academy Scholar and Junior Academy Scholar from those in the student's Portfolio Group.

Satisfactory assessment for each reflection requires evidence that the student showed:

1. Critical reflection on the meaning of the story to them; AND
2. Addressing the theme as outlined for each reflection.

In order to achieve a pass on the Portfolio Submission Component, all three of the submitted reflections must be rated 'Satisfactory'. Students receiving 'Unsatisfactory' on any of their initial two reflections will be able to improve their standing by acting on the feedback received, and showing their Academy Scholar that they have done so.

Students will be offered the opportunity, on a voluntary basis, to select one of their Reflections from either third or fourth year Portfolio for publication in a text for the incoming first-year and third-year classes.

For details, including grading regulations, see the course website on the U of T portal (http://portal.utoronto.ca – registered users only), and the program policies related to examination and assessment (http://www.md.utoronto.ca/policies).

NB: In order to receive credit for Portfolio year 4, students must also complete the required evaluations of teachers and of the course, as specified in the course outline, in conformity with the *Principles and Expectations for Student Completion of Teacher and Course Evaluations in UME (PDF)*.

Course objectives

Goal: The goal of the course is to build upon students' work in PFL310Y, in that they will use critical reflection to assess their progress as professionals in the final year of their undergraduate medical education, and to forecast their needs as they enter postgraduate training, with regards to the complexities of the CanMEDS roles.

A. General Objectives:

At the end of this course, the student will:

- Be able to reflect critically on their professional trajectory over their undergraduate medical education.
- Demonstrate fluency with the CanMEDS roles, in particular the ways in which they inter-relate and overlap.
- Be able to describe their ongoing personalization and enactment of the CanMEDS roles, as illustrated by recent clinical experiences.
- Be able to write clearly about their global professional development.
- Provide appreciative and developmental feedback to peers on their reflections.
- Forecast their future needs for development within their planned postgraduate and practice careers.
- Contribute their perspective on medical training to the newest members of the incoming class.

B. Competencies:

The student will:

Professional

- Display respectful and supportive behaviour towards the stories, and feelings, of their classmates within the Portfolio Group meetings
- Safeguard the confidentiality of all discussions within Portfolio Groups, meaning that no information divulged there may be discussed or disclosed outside the meeting, except when creating a Portfolio submission, which shall itself be confidential
- Create reflective writing for the Portfolio submission that demonstrates respect for the privacy of patients, colleagues, and other individuals, while still telling an authentic story that is personally meaningful to the student

- Be able to critique his/her own development as a Professional
- Be able to forecast his/her learning needs as a Professional

Communicator

- Be able to convey a story of himself/herself in a clinical situation that relates to the theme under discussion. The story will be conveyed clearly and with appropriate emphasis on its meaning, in both verbal form and written form
- Provide appreciative feedback to peers in reflection upon the stories presented within the Portfolio Groups
- Be able to critique his/her own development as a Communicator
- Be able to forecast his/her learning needs as a Communicator

Collaborator

- Work well with peers and promote participation of all members to enhance the climate for learning for the entire group
- Be able to critique his/her own development as a Collaborator
- Be able to forecast his/her learning needs as a Collaborator

Health Advocate

- Be able to critique his/her own development as a Health Advocate
- Be able to forecast his/her learning needs as a Health Advocate

Leader

- Be able to critique his/her own development as a Leader
- Be able to forecast his/her learning needs as a Leader

Scholar

- Develop and use critical reflection skills in the analysis of the importance of the stories described, while creating their Portfolio submissions
- Act on feedback to improve their reflections as required
- Reflect on how they can use their experiences to guide or mentor more junior learners
- Be able to critique his/her own development as a Scholar
- Be able to forecast his/her learning needs as a Scholar

Textbooks/learning resources

There are no required reading materials for this course. Exemplars of satisfactory reflections will be provided to students. Students may find the following recommended reading helpful in developing their reflections:

- Aronson L. (2011). Twelve tips for teaching reflection at all levels of medical education. Med Teach; 33: 200-205.

Getting More Involved

There are a number of ways to become more active in the MD Program, whatever your current level of participation. Several of these opportunities are described below.

The major types of teaching opportunities for prospective MD Program teachers are outlined under Learning Modalities for Foundations and Learning modalities for years 2, 3 and 4. Faculty members who are interested in teaching medical students are invited to contact the following individuals, depending on the kind of teaching they are interested in:

Type of teaching role	Who to contact
Foundations teaching	
For information about the various teaching roles and job descriptions visit the Foundations website.	
If you are interested in getting involved, contact the Academy Director associated with teacher's hospital/community	
Preclerkship teaching	
Preclerkship small group leader (ASCM-2 tutor, problem-based learning tutor)	Academy Director associated with teacher's hospital/community
HSR tutorial leader	HSR course director
Preclerkship seminar leader or lecturer in teacher's specific area of basic science or clinical expertise	Preclerkship course director
Preclerkship Day of the Doctor. Physician Shadowing in year 1 and 2	Academy Director associated with teacher's hospital/community
Family physician supervisor for individual (1:1) Preclerkship student placements (FMLE)	FMLE course director
Preclerkship Preceptor for Enriching Educational Experiences (EEE)	EEE Director
Clerkship teaching	
Seminar leader or lecturer during clinical clerkship rotation	Clerkship course director
Clinical clerk supervisor (in ambulatory clinic and/or in-patient setting)	Clerkship site director for specific clinical clerkship rotations (see Course Descriptions)
Portfolio group facilitator	Portfolio Coordinator
Clerkship elective supervisor – see next page	Clerkship Electives Officer
Transition to Residency (TTR) selective supervisor	TTR Coordinator

Faculty opportunities & resources

Clinical elective and selective supervision

In addition to teaching in the core clerkships, faculty members can accept elective or selective students for clinical experiences lasting two weeks or more. The objectives may be determined by the faculty member or in dialogue between the student and the faculty member. Students on elective or selective are in their final year of the program.

For more information, see: http://www.md.utoronto.ca/electives-office or contact Dr. Seetha Radhakrishnan, Electives Director, at seetha.radhakrishnan@sickkids.ca.

Serving as a year 3 Integrated OSCE examiner

During the third-year clerkship, students are required to complete two integrated OSCE (iOSCE) examinations. The first takes place midway through the academic year in March, and the second at the end of the Clerkship year in August. The exam covers clinical skills pertinent to all of the clinical disciplines that students encounter during the Clerkship, and students must pass the iOSCE to complete their medical studies. Serving as an iOSCE examiner is therefore critically important to the students' education, and a very good opportunity for teachers to understand the level of clinical competence achieved by the students.

Faculty members interested in participating in the iOSCE should contact the course director for the clinical clerkship rotation in their University Department. (Clerkship course director contact information)

Enriching Educational Experience (EEE) Preceptorships

The Enriching Educational Experiences (EEE) Program has been incorporated into the Foundations Curriculum as a component of ICE (Integrated Clinical Experience) for the 2T0 class. Enriching Educational Experiences are clinical placements organized for self-directed learning that allow students to explore different career options in different settings and with different preceptors. Enriching Educational Experiences may involve a range of activities based on the principles of **delegated** and **graded** responsibility. Some EEE activities are contained within Longitudinal Experiences (LEs) organized by various departments or student interest groups. The EEE Module within MedSIS can help students organize and carry out activities in ways that are fair and informed. Occupational insurance for unpaid clinical placements like EEE activities may depend on whether the activity is taken as part of the curriculum (ICE: EEE) or outside the curriculum.

All EEE activities must be logged with the EEE Program in MedSIS where students can also access a catalogue of past activities that can be used as a starting point for organizing experiences. The Module also contains important information for students and supervisors about how these activities are to be carried out, and information about insurance coverage.

Participating as a preceptor or mentor in the EEE program is an excellent option for faculty members who are unable to commit to core teaching but would like to be involved in the growth, development, and education of our future physicians.

Any faculty members with questions about the program or who wish to join the database are welcome to contact Dr. Jon Novick, Career Exploration Faculty Lead, at jon.novick@utoronto.ca.

For additional information, see:

Faculty opportunities & resources

http://md.utoronto.ca/career-exploration

U of T medical student observership experience with ICHA physicians

The Inner City Health Associates (ICHA) is a group of over 60 family physicians, internists and psychiatrists working in over 40 shelters and drop-in facilities across Toronto. ICHA provides primary, mental health and palliative care to those who do not otherwise have access to care. This organization serves people living on the street and in shelters as well as those who are precariously housed.

Each year, OHPSA works with ICHA to provide medical students (mainly those in preclerkship) with an opportunity to shadow ICHA physicians for a single half-day experience. This serves as an introduction to learning about the complex medical, social and financial challenges facing some of the most vulnerable members of our society. This experience will reinforce some of the learning objectives pertaining to the determinants of health taught in the Community, Populations and Public Health (CPPH) courses, and allow students to gain insight into the various agencies and organizations working with specific populations in Toronto.

Physicians will be directly responsible for supervision of observers as per the EEE program guidelines. Interested students should contact Ike Okafor Senior Officer, Service Learning and Diversity Outreach at ike.okafor@utoronto.ca.

Franco Doc shadowing experiences

OHPSA, along with the U of T Medicine Communauté Francaise (student group) and Réseau franco-santé du Sud de l'Ontario, are working together on the AFMC Franco Doc initiative to increase French usage amongst future physicians by organizing and supporting clinical and experiential activities in French and Bilingual environments.

Funding is available throughout the school year and summer to support shadowing and clinical rotations in French and Bilingual clinical settings. Interested students should contact Ike Okafor Senior Officer, Service Learning and Diversity Outreach at ike.okafor@utoronto.ca

Career mentorship and education

During the MD Program, students not only acquire the knowledge and skills required for the practice of medicine, but also engage in an ongoing process of career exploration. Faculty members can play a critical role in this process through various activities including mentorship, career talks, and special programs offered by some clinical departments in the Faculty of Medicine. To learn more about the options available to faculty members, please contact Dr. Leslie Nickell, Associate Dean Health Professions Student Affairs, at leslie.nickell@utoronto.ca, the Academy Director associated with your hospital (see Academy contact information), Dr. Jon Novick, Career Exploration Faculty Lead, at jon.novick@utoronto.ca, or the course director/undergraduate program director of your Faculty of Medicine Department (see the Clerkship contact information).

Course committees

Every course in the MD Program has a course committee which is responsible for the design, implementation, and evaluation of the course. The committee generally consists of the course director, administrative staff, student representatives, and several faculty members. The faculty members on the

committee are usually those responsible for a significant teaching unit in the course and/or for one of the sites where learning takes place during the course. Teachers who are already involved in a course and wish to explore the possibility of contributing further to the course's organization are encouraged to contact the course director (see Preclerkship contact information or Clerkship contact information).

Leadership roles

There are many leadership roles in the MD Program, including being a course director, a site director within a course, or an organizer of a major segment or unit of a course. Teachers, particularly those already involved in a course, are encouraged to discuss leadership opportunities with either the relevant course director or the Preclerkship or Clerkship director (see Preclerkship contact information or Clerkship contact information).

Admissions file review and interviews

Every year, a large number of faculty members contribute their time and experience to the MD admissions process, helping to determine which of the thousands of applicants will be granted an interview and, of those, who will be offered a place in the next first-year class. Faculty members who are interested in participating in the admissions process as file reviewers and/or interviews are encouraged to contact the UME Enrolment Services Offices at md.admissionsoffice@utoronto.ca.

Research

University of Toronto medical students have many different opportunities to learn about research, both during the regular curriculum and at other times, notably the two summers of the Preclerkship.

Learn about research as part of the curriculum:

Students receive a comprehensive introduction to health science research, both how it is conducted and how it is applied to the care of patients and communities during the Health Science Research course (see Health Science Research for details).

Research Outside the Curriculum: The major MD Program that supports funded research activity for medical students is called the **Comprehensive Research Experience for Medical Students (CREMS)**. CREMS is a unique research program in Canada that allows interested U of T medical students to gain extracurricular research experience in any field in various structured programs without interrupting their medical studies. See http://md.utoronto.ca/research.

There are four main programs which involve University of Toronto faculty:

1. *CREMS Research Scholar Program:* A 20-month longitudinal program that runs from January of the student's first year in the MD program to the end of August in the summer between second and third year, with full-time research during the summers. Student funding is divided equally between the CREMS program and the research supervisor. Faculty are encouraged to submit applications early so they can be posted online. See http://md.utoronto.ca/research-scholar-programs for more information and the application process.

2. *CREMS Summer Program:* A full-time 10-12-week summer research program between first- and second-year or between second- and third-year. Student funding is divided equally between the CREMS program and the research supervisor. See http://md.utoronto.ca/summer-research-programs for more information and the application process.

3. *MAA CREMS International Health Summer Research Program:* A 10-12-week international summer research program in which students participate in research related to important health issues in developing nations, conducted under the auspices of the on-going international work of a U of T faculty member. The program is run in partnership with the Medical Alumni Association, which provides the majority of the funding for this program. For more information, see: http://md.utoronto.ca/medical-alumni-association-crems-programs > see *International Health*

4. *MAA-CREMS Research in the Humanities and Social Sciences:* This 10-12 week summer program is for students who have a keen interest in the humanities or social sciences directly related to the field of medicine. Two students are selected each year with a preference for one student to do a project related to the history of medicine. Faculty do not have to be within the Faculty of Medicine. For more information see: http://md.utoronto.ca/medical-alumni-association-crems-programs > see *Humanities and Social Sciences*

The objectives of all of the CREMS programs are to allow medical students to explore and gain valuable research experiences, to prepare medical students for a career as a physician with a good research foundation and understanding of biomedical research, and to engage and encourage students to consider a career as a clinical scientist.

In addition to CREMS, many faculty members supervise medical student research organized through their hospital research institutes or similar organizations. Interested faculty members should contact their research institute administration for information on any programs that they support.

Faculty who are interested in either supervising medical student research through the CREMS program or in publicizing a non-CREMS research opportunity to medical students should contact the program director at crems.programs@utoronto.ca.

Faculty opportunities & resources

E-Resources & IT services

The MD Program employs a number of different online resources. Each plays an important role in the program, for both teachers and students. Please take a few minutes to familiarize yourself with them.

MD Program website

http://www.md.utoronto.ca

This is the public website for the MD Program, and has been designed to meet the needs of several specific user groups: students, teachers, course directors, and applicants. Full descriptions of all aspects of the program and the resources that are available to students and teachers are described on the site. In addition, all MD Program policies are posted, as well as links to other important information maintained by the Faculty of Medicine, the University of Toronto, and outside organizations.

The website also has several new features, including a student assistance section. In this section, students can: view advice if they are experiencing urgent or crisis situations; access an incident report form to report distressing events that they experience or witness; and, access resources related to absences from the program that they may need to take. Teachers should be familiar with the existence of these resources.

The latest version of this *Teacher Handbook* is also posted on the website, in the Teaching in the MD Program section.

UTORid

All University of Toronto faculty members and trainees (including residents) are entitled to have a UTORid, the unique username for a variety of online services including the Portal, the University of Toronto Library system, University of Toronto e-mail, and WiFi access across the campus on the UofT network.

UTORids are typically eight characters long and take the first part (or all) of your last name, usually followed by the first letters of your first name and/or random numbers. E.g., singh516, leungden, etc.

Most faculty members are assigned a UTORid upon appointment, but may not have activated it. Trainees are assigned a UTORid at the time of registration. If you do not know your UTORid or do not believe you have one, please contact:

- The business officer of your University Department, if you are a faculty member
- The administrator of your program, if you are a postgraduate trainee or graduate student
- The Help Desk of the Discovery Commons, the IT department of the Faculty of Medicine (416-978-8504 or discovery.commons@utoronto.ca), if you are a faculty member.
- The course administrator of the course in which you teach (if you are not a faculty member, postgraduate trainee, or graduate student)

A note about security: Once you have logged into one UTORid-based one online service (e.g. the Portal), you will remain logged in for other services as long as you keep at least one browser window open on your computer. To end your secure session (i.e. to log out), you **must** close all browser windows.

Faculty opportunities & resources

UofT wifi

Networks: UofT, eduroam (login: UTORid and password)

There are two wireless networks available on campus, including "UofT" and "eduroam":

- The UofT wireless network is intended for day-to-day usage. It supports wireless, signals and does not require a browser-based login each time you connect. For devices capable of wireless, it is faster and has increased range.
- The eduroam network at U of T is intended for visiting scholars from other participating eduroam institutions. Likewise, U of T faculty and students can log into eduroam at other universities using their U of T credentials.

Before you can access the UofT network, you will need to register your UTORid by using the verify tool. This must be done *even if your UTORid is working for other services.* To verify, use this link:

https://www.utorid.utoronto.ca/cgi-bin/utorid/verify.pl

There will be a short delay between verifying and being able to access UofT. Please note that the device will be configured with the UTORid and password that was used to set it up, and it is therefore not recommended for shared computers or devices.

For help with using the UofT WiFi network, call the Information Commons helpdesk at 416-978-HELP (4357) or visit: http://help.ic.utoronto.ca/category/20/wireless-access-utorcwn.html.

Portal

http://portal.utoronto.ca (login: UTORid and password)

The Portal (powered by an application called Blackboard®) is a secure website used across the University as a hub for course websites, including MD Program courses. Login requires a password, and is via UTORid (see above). Unlike the MD Program website (see above), the Portal is designed for **internal use only**, so that members of the public cannot access these sites. At a minimum, all MD Program courses post their materials on the Portal, and many courses use other features such as announcements as well.

Every MD Program teacher is expected to have access to the Portal websites of the courses in which they participate. This access should be given to you automatically, but you may need to provide your UTORid to the course administrator. If you log into the Portal (http://portal.utoronto.ca), you should find all of the courses in which you are teaching listed, and thus you can access the materials for the course(s). If you do not find that a given course in which you teach is listed, please contact the course administrator. Please make full use of your Portal access to retrieve course information, lecture materials, seminar notes, etc.

University of Toronto libraries

http://www.library.utoronto.ca (login: UTORid and password, or library card barcode and password)

The University of Toronto library system has one of the most comprehensive collections of both print and online resources in the world. The Gerstein Science Information Centre is of particular importance in health sciences education. Online resources for Gerstein and the other U of T libraries are accessible to all members of the University of Toronto via their UTORid.

Faculty opportunities & resources

Medical Student Information System (MedSIS)

http://medsis.utoronto.ca (login: UTOR ID and password)

MedSIS is the secure online system that the MD Program uses to record and calculate student assessments by teachers in all courses, obtain student feedback on their teachers and courses, maintain student registration information, and perform course scheduling in all Foundations, Preclerkship and some Clerkship courses.

Teachers who are assigned to complete an online student evaluation form on MedSIS will receive an automated e-mail at the appropriate time from medsis.server@utoronto.ca with instructions on logging in and completing the form. Follow-up reminder e-mails will be sent if the form(s) remain incomplete.

If you receive a prompt to use MedSIS and have never logged in before should go to the MedSIS website (http://medsis.utoronto.ca), click 'Login to MedSIS', and then click 'Forgot your password?' Enter the **same e-mail address** at which you received the prompt, and your userid and temporary password will immediately be sent to you by e-mail. For security, when you next log into the system, you will be required to change your password.

In addition to completing student evaluations on MedSIS, teachers can also:

- update their contact and appointment information
- see their teaching schedule (all Preclerkship courses and didactic sessions in some Clerkship courses), and sync this schedule to other electronic calendars
- review their TES reports (select courses – check with your course administrator for details)

If you need assistance with any of the functionality within MedSIS, you can contact:

MedSIS Help Desk: Support by Knowledge4You, the company that developed MedSIS; can assist with all aspects of the software	medsis@knowledge4you.com 905-947-9924 x223
Evaluations Project Coordinator / Data Analyst, MD Program: In-house MD Program MedSIS support can provide orientation and training	medsis.ume@utoronto.ca 416-946-7040

Case logs

All year 3 clinical clerks are required to log the required encounters and procedures defined in each rotation, using an online system called 'Case Logs.' Completion of the list of requirements is necessary to obtain credit in each course.

Individual clinical preceptors or supervisors are not required to use Case Logs directly, but do make use of student logs to identify and remedy gaps in each student's experiences. Be aware that students may be keeping track of their encounters and procedures using handheld devices, a computer on the ward, or even on paper for later entry into Case Logs. They may also request particular experiences in order to

fulfill their requirements.

Supervisors who are assigned to complete mid-rotation feedback and evaluations of students have a particular responsibility with regard to clinical logs. As part of mid-rotation feedback, these supervisors must meet with the student, who will present their (in progress) Case Log Report. The supervisor and the student are expected to discuss the encounters and procedures logged to date, and the plan for completion of any that are still outstanding in the second half of the rotation.

At the end of the rotation, students submit a final Case Log Report to either their site director or course director. It is expected that all required experiences will be complete by this point, but if gaps remain, the course director will facilitate completion by providing appropriate clinical experiences or virtual cases for the student.

MD curriculum map (CMap)

https://medsis.utoronto.ca (login: MedSIS PIN and password)

The curricular content of all teaching and learning events across the four-year MD Program is described and classified in the Curriculum Mapping module in MedSIS. This searchable reference tool is accessible to MD Program teachers and curriculum planners, and to all medical students, past and present. The Curriculum Mapping module is intended to support all aspects of the design, implementation and analysis of the curriculum. Each MedSIS event (lecture, seminar, lab, PBL case, etc.) is captured and classified according to the following parameters:

- Location in the program (year, course, date (for scheduled preclerkship events))
- Keywords (including a weighting for levels of coverage)
- MD Program goals and competencies supported by the activity (weighted for levels of coverage)
- Medical Council of Canada Objectives (weighted for levels of coverage)
- Special topics (traditionally under-represented topics, often outside of traditional domains)

The curriculum mapping description for many events, particularly lectures in the Preclerkship block courses, are linked to the full PowerPoint slide presentation delivered in the event. This feature enables students, teachers and others to review the content of entire events of interest.

The map can be searched either by keywords or by one of the learning parameters listed above. For example, a user may perform a keyword search on a term such as 'asthma' to locate the sessions in the program where asthma is a prominent topic. One can also, for instance, search for events that provide the material required by a MD Program competency such as Communicator-3 (deliver information to the patient and family in a humane manner), or by an MCC objective/presentation such as 'Cough'.

This tool is available to members of the Faculty of Medicine community with valid MedSIS user accounts. To access the Curriculum Mapping module, users simply login to MedSIS with their MedSIS PIN and password and select Curriculum Mapping from the left side-bar. To access associated PowerPoint slides, users must be logged in to the U of T portal https://portal.utoronto.ca/ in a separate tab before clicking on the link to the slides.

Electives catalogue and registration system

Catalogue: http://medsis.utoronto.ca/electives/

Faculty opportunities & resources

Registration system (ROUTE on MedSIS): https://medsis.med.utoronto.ca/

AFMC National Portal: http://www.afmcdstudentportal.ca

Elective experiences offered by University of Toronto faculty members are made available to University of Toronto students using the catalogue link above, as well as the experiences that students have registered in ROUTE on MedSIS. Students are also free to arrange electives outside these sources by contacting faculty members directly.

The ROUTE on MedSIS registration system is currently being used by U of T students to propose and register electives offered through UofT (see second link above). When a U of T student proposes an elective with a particular supervisor, a notification is sent by e-mail to the designated Placement Contact (administrative or supervisor) with a request to review the submission. The Placement Contact may then accept, edit or decline the elective. Notification of this decision is sent to the student. If there are submissions that do not comply to present policy, they will first be validated by the Electives Office before notification is sent to the Placement Contact. When a student confirms as elective, it is considered registered. Notifications of confirmed or cancelled electives are sent to the Placement Contact and to the Medical Education Office, where applicable.

A similar process is followed for visiting electives. The AFMC National Portal is used to register electives with medical schools in Canada (third link above).

For changes to the catalogue or questions about using ROUTE on MedSIS for electives by U of T students, please contact the Electives Office at electives.uoft@utoronto.ca. For questions about electives for visiting students from Canadian and US medical schools, please contact the Visiting Canadian and US Electives Office at medicine.electives@utoronto.ca. For questions about electives for visiting students from international (non-US) medical schools, please contact medicine.intelective@utoronto.ca.

E-learning

In various courses in Foundations, Preclerkship and Clerkship, online resources are used to complement more traditional learning methods. For example, students have an opportunity to learn through simulated microscope labs (e.g., STF), detailed clinical case scenarios (e.g., Paediatrics), and modules on patient safety (e.g., TTC).

Individual teachers do not generally need to make use of these resources (although the practice in specific courses may vary). Nonetheless, it can be useful to be aware of what materials students are using to deepen or complement their learning. While in some courses, e-learning resources are provided as an optional study aid, in many cases, they constitute mandatory content and/or assessments that all students must complete. (See the course descriptions in this handbook and further details on the individual portal sites for each course.)

Questions about course-specific online resources can be directed to the course director or course administrator.

Information on videoconferencing in the classroom

All Preclerkship (first- and second-year) lectures in the University of Toronto's MD Program are videoconferenced between the Medical Sciences building on the St. George campus and the Terrence Donnelly Health Sciences Complex on the University of Toronto Mississauga campus. In addition, recordings are made of every lecture in the Preclerkship (both video and presentation materials), and are then posted online for student access.

Videoconferencing is also being used increasingly for seminars in both the Preclerkship and Clerkship.

Full support is provided by the Discovery Commons in the Faculty of Medicine. See: http://lecturesupport.med.utoronto.ca for more information.

Lecture presentation guidelines for videoconferencing

With the opening of the Mississauga Academy of Medicine and the program to videoconference lectures between the St. George and the Mississauga campuses, new standards for presentations have been implemented in order to provide an equivalent education to all students, regardless of their location. Below are some guidelines for creating presentations for videoconferenced lectures, as well as established best practices for presenting.

Rules about Laptops and Software

- **Ensure that your presentation file is sent or uploaded 10 business days before the lecture takes place** to allow adequate time for necessary testing and formatting. Use UTMedfiles.ca, the file upload application for U of T Medicine, to upload your presentations and any associated files.
- You must use the teaching station PC or the document camera to present your lecture. Use of laptops or other devices during the videoconferenced lecture is not supported.
- If you use a Mac, you may create your presentation in Powerpoint for the Mac or in Keynote; if you create in Keynote, technicians will convert it to a Powerpoint or Quicktime file and test it on the presentation computer in the lecture room before your lecture.

Content standards

- All lecturers must disclose any potential conflicts of interest that they may have with commercial products, research findings, etc. mentioned in their presentation, on their second slide (after the title slide). See *Procedure for Disclosure of Potential Commercial or Professional Conflicts of Interest by UME Teachers* (PDF)
- Videoconferencing reduces the amount of material that can be covered in lecture, so plan for 40-45 minutes of material instead of 50 minutes.
- Do not change the content of your presentation after submitting it for publication and posting; the submitted presentation will be used for your lecture.

Intellectual Property

- It is the responsibility of lecturers to ensure that their presentations follow the guidelines set by the University and the Canadian government regarding intellectual property.
- Go to www.teaching.utoronto.ca → Essential Information for details on the regulations.

Formatting standards:

- Use a 24-28 point for text.
- Use basic fonts like Arial, Tahoma or Verdana. Avoid cursive fonts.
- Avoid animations and page transitions beyond straight cuts.
- Don't reduce font size to fit information in; start a new slide instead.
- Rule of thumb: max 6 lines of text per slide, max 6 words per line of text
- Make sure your text doesn't run to the edge of the slide as it may get cut off during projection.

For more details on each standard, information on interactive lecturing through the use of 'clickers', and to download Powerpoint templates, conflict of interest slides, and more, please see: http://lecturesupport.med.utoronto.ca/content/presentation-elements

Lecturer Support for Videoconferencing

The technical support team provides technical assistance and training for lecturers, and also schedules, configures, and monitors every lecture from a nearby control room, allowing lecturers and students to focus on teaching and learning. Contact discovery.commons@utoronto.ca to schedule a training session on the equipment.

BEFORE the Lecture:

Contact the Discovery Commons Service Desk, Monday to Friday, 8am to 5pm.

416-978-8504

E-mail: discovery.commons@utoronto.ca

DURING the Lecture:

All lectures are monitored by professional videoconferencing technicians at both campuses and most technical problems will be addressed before you even notice them. For immediate assistance just before or during a lecture, either:

- use the support intercom on the Teaching Station
- address the videoconferencing technicians by speaking into the presenter's podium microphone or the lapel microphone
- call the Discovery Commons Videoconferencing Hotline: 416-978-0007

If you contact technical support during a lecture, you will be talking to a live technician, and a technical support person can be in the room within one minute, if required.

AFTER the Lecture:

To provide feedback on your experience with lecture videoconferencing, contact the Discovery Commons Audio-Visual Technology Team Lead, Janet Koecher (416-946-3285 / janet.koecher@utoronto.ca).

Faculty opportunities & resources

Seminar presentation guidelines for videoconferencing

A videoconferenced seminar is much like any other seminar that you would conduct: students gather and you lead the seminar in a focused discussion with or without a presentation, such as PowerPoint. The main differences with a videoconferenced seminar are that your students are in multiple locations and you have a layer of technology between yourself and some of the students. There are a number of things that you can do in preparation for and during the seminar to ensure a successful experience for all participants.

Go to: http://lecturesupport.med.utoronto.ca/content/videoconferenced-seminars for more information.

Faculty opportunities & resources

Faculty Development is a broad range of activities that institutions use to renew or assist faculty, supervisors, preceptors, field instructors, clinical educators, and status appointees in their roles. These activities are designed to improve an individual's knowledge and skills in teaching, education, administration, leadership and research.

There are three major ways in which MD Program teachers can access faculty development:

Office of Faculty Development, MD Program

The Office of Faculty Development offers a variety of opportunities to help medical educators prepare for their teaching roles in the MD Program at the University of Toronto. We offer a comprehensive and wide range of faculty development activities that are designed specifically to support faculty member's undergraduate teaching responsibilities in the Foundations, Preclerkship and Clerkship curriculum, such as:

- Course Introduction and Orientation sessions
- Small Group Workshops
- Local course specific just-in-time "EduCafes"
- Webinars
- Education Modules
- Instructional Videos
- Electronic Newsletter
- Individual consultations

The Office provides faculty development opportunities across all four academies, including the FitzGerald, Mississauga, Peters-Boyd and Wightman-Berris Academies and their affiliated hospital sites. All faculty members are welcome to attend.

We look forward to connecting with you. Please watch for e-mail promotions and communications that will include information regarding the faculty development offerings available to support your course-specific teaching. To be added to our contact list, please contact the Office of Faculty Development directly.

Faculty opportunities & resources

The Office of Faculty Development, MD Program is accredited by Continuing Education and Professional Development at the University of Toronto.

For more information, please visit the Office of Faculty Development website (http://www.ofd.med.utoronto.ca) or contact us.

Contact Us:

Jana Lazor, EdD – Director of Faculty Development – jana.lazor@utoronto.ca
Lori Innes – Faculty Development Coordinator – lori.innes@utoronto.ca

Office of Faculty Development, MD Program
Faculty of Medicine, University of Toronto
Medical Sciences Building, Room 3157
1 King's College Circle, Toronto, ON M5S 1A8
Tel: 416-978-1699

CENTRE FOR FACULTY DEVELOPMENT (CFD)

The Centre for Faculty Development (CFD) is an Extradepartmental Unit (EDU) and a partnership between the University of Toronto (UofT) and St. Michael's Hospital (SMH). The CFD is committed to enhancing the academic development of faculty in the Faculty of Medicine, additional Health Science Faculties (i.e. nursing, pharmacy, etc.) at U of T, and other institutions through innovation, capacity building and scholarship in the design, implementation and evaluation of faculty development. In addition to this commitment, the CFD welcomes anyone, regardless of whether they have a faculty appointment or not, who has a role related to teaching, education and academic work in their healthcare organization or setting.

The CFD provides a range of faculty development programs and activities in support of:

- Teaching & Education
- Academic Leadership
- Faculty Developers
- Career Development
- Research & Evaluation

Faculty opportunities & resources

For more information, please visit the Office of Faculty Development website (http://cfd.utoronto.ca/) or contact us directly:

Centre for Faculty Development
Li Ka Shing International Healthcare Education Centre, St. Michael's Hospital
209 Victoria Street, 4th floor
Phone: (416) 864-6060 x77420
General Inquiries: cfd@smh.ca

FACULTY DEVELOPMENT ORGANIZED BY INDIVIDUAL DEPARTMENTS

Individual departments offer a spectrum of faculty development programs, ranging from workshops to longer-term programs. For details, please contact your Department's Vice-Chair Education or equivalent.

Department of Anesthesia
http://www.anesthesia.utoronto.ca/edu/Faculty_Development.htm

Department of Emergency Medicine
http://www.dfcm.utoronto.ca/programs/Divisions/emerg/emergfacultydevelopment.htm

Department of Family and Community Medicine
http://www.dfcm.utoronto.ca/facultyandstaff/pdce.htm

Department of Obstetrics and Gynecology
http://www.obgyn.utoronto.ca/faculty-development

Department of Ophthalmology and Vision Science
http://www.utovs.com/en/cpd

Department Otolaryngology
http://www.otolaryngology.utoronto.ca/undergraduate/fac_development.htm

Department of Pediatrics
http://www.sickkids.ca/Paediatrics/Education-and-learning/Faculty-Development/index.html

Department of Psychiatry

Faculty opportunities & resources

http://www.psychiatry.utoronto.ca/education/faculty-development/

Department of Surgery

http://surgery.utoronto.ca/education.htm

Department of Medicine

www.deptmedicine.utoronto.ca

Education and Teaching Awards

Education and teaching awards are granted each year in recognition of individual teachers' excellent contributions across the medical education spectrum. Internal awards are granted at the Department, Academy, Program and Faculty levels, and external awards are offered by the University of Toronto and various provincial, national and international agencies.

We belong to a diverse community of teachers and scholars committed to advancing medical education. Help us to recognize excellence across the education continuum by nominating peers, colleagues, mentors and mentees who are making a difference.

Internal Awards

For information about Departmental, Academy, and Program awards, please visit each unit's webpage.

Faculty-wide awards are granted in the following areas:

- Undergraduate Medical Education
- Undergraduate Teaching in the Life Sciences
- Integrated Medical Education (Community Teaching Awards)
- Graduate Education
- Postgraduate Education
- Continuing Education and Professional Development

For more information about internal awards, please visit: http://www.medicine.utoronto.ca/faculty-staff/awards-internal-teaching-awards.

External Awards

Twice each year, our Faculty has the privilege of recognizing outstanding contributions to teaching and education by nominating, faculty members for a suite of external provincial, national and international awards. Calls for nominations for the internal review process are circulated in May and November, and include awards for early career achievement, sustained excellence, innovation, mentorship, advocacy, and program development. To find a list of all of the external awards, please visit http://www.medicine.utoronto.ca/faculty-staff/awards-external-teaching-awards

Faculty opportunities & resources

Please note that for many of these awards, student support is a requirement for nomination.

Questions?

To learn more about teaching awards at the Faculty of Medicine, please visit: http://www.medicine.utoronto.ca/faculty-staff/faculty-medicine-teaching-awards or contact the Education and Teaching Awards Coordinator for the Faculty of Medicine at (416) 946–3921 or by e-mail at EduDeans@utoronto.ca.

Faculty resources

If you encounter a problem…

… related to the curriculum overall:		
[Specifically the Foundations, i.e. year 1]	Contact the Foundations Director	Dr. Marcus Law, marcus.law@utoronto.ca
[Specifically the Preclerkship, i.e. year 2]	Contact the Preclerkship Director	Dr. Pier Bryden, pier.bryden@utoronto.ca
[Specifically the Clerkship, i.e. years 3 and 4]	Contact the Clerkship Director	Dr. Stacey Bernstein, stacey.bernstein@sickkids.ca

… related to your teaching responsibilities in a particular course:		
[For central teaching in Foundations, Preclerkship or Clerkship)]	Contact the course director	See the relevant course description for contact information.
[For hospital teaching in Foundations or Preclerkship]	Contact the Academy Director	See the relevant course description for contact information.
[For hospital teaching in the Clerkship]	Contact the site director	*See:* Course Descriptions

… related to information technology or audiovisual technology:		
[For an MSB or MAM lecture theatre videoconferencing or lecture recording problem]	Contact the Discovery Commons	*Contact:* Intercom button on podium (immediate) or 416-978-8504 (non-emergency) or discovery.commons@utoronto.ca
[For other AV problems in MSB lecture theatres]	Contact the Office of Space Management	*Contact:* Intercom button on podium (immediate) or 416-978-6544 (non-emergency) or go to www.osm.utoronto.ca
[For after-hours MAM/UTM lecture theatre videoconferencing or lecture recording problem]	Contact Technology Resource Centre	*Contact:* 905 569-4300 or crt@utm.utoronto.ca
[For other types of problems in MAM/UTM	Contact Technology Resource	*Contact:* 905-569-4300 or crt@utm.utoronto.ca

Faculty resources

lecture theatres]	Centre	
[For problems in a hospital/Academy Med Ed Centre]	Contact Academy Med Ed staff	*See:* Academies & training sites
[For problems in another area of the hospital]	Contact your local IT department	*Consult*: your hospital's directory for contact information
[For MedSIS-related problems]	Contact the MedSIS Project Coordinator	*Contact:* Frazer Howard at 416-946-7040 or fraz.howard@utoronto.ca
[For all other IT-related inquiries]	Contact Discovery Commons	*Contact:* 416-978-8504 or discovery.commons@utoronto.ca or http://dc.med.utoronto.ca

… related to a teaching evaluation you have received:	
Contact the course director of your course	*See:* The course description for the course you teach.

… related to student academic performance:	
Contact the course director of your course	*See:* The course description for the course you teach.

… related to student behaviour (professionalism):	
Refer to professionalism protocols to determine how to proceed.	*See:* The Student Professionalism section of the handbook.

… related to an incident of student injury or exposure to infectious disease:	
Refer to flowchart on student injury in clinical settings.	*See: Protocol for incidents of medical student injury and exposure to infectious disease in clinical settings* *and check the* student assistance advice tool: www.md.utoronto.ca/student-assistance

Faculty resources

… related to an incident of mistreatment or harmful behaviour towards a student:	
Contact the Associate Dean HPSA	*Check the* student assistance advice tool: www.md.utoronto.ca/student-assistance *then contact:* Dr. Leslie Nickell, Assoc. Dean HPSA, leslie.nickell@utoronto.ca or 416-978-2713

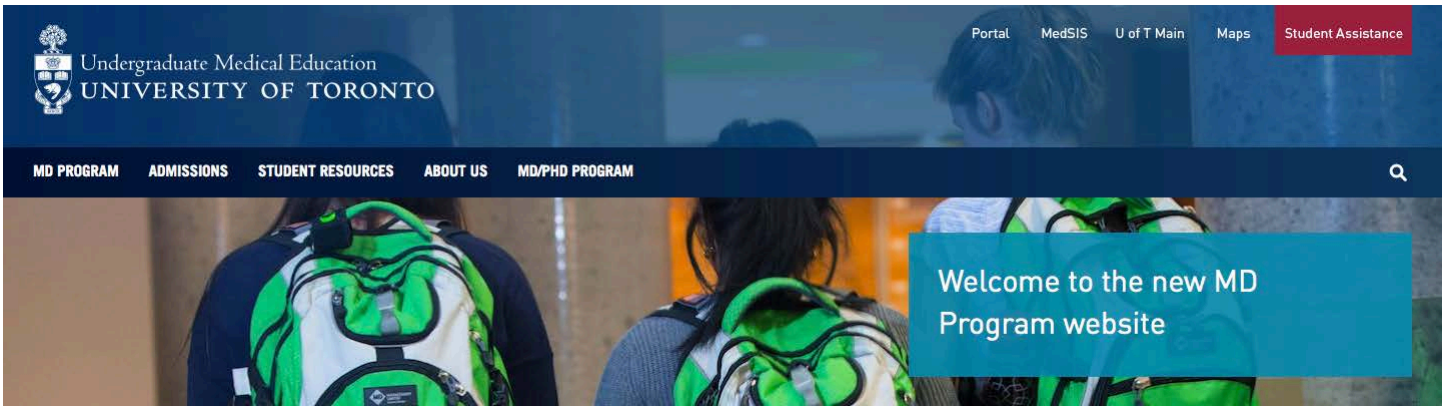
Student Assistance

Student Assistance (formerly the 'Red Button') and the Incident Report Form

Student assistance information on MD Program website

The student assistance section of the MD Program website (formerly known as the 'Red Button') provides quick reference information and resources for medical students at the University of Toronto who are experiencing an urgent or crisis situation.

The student assistance 'button' is displayed on the website in the upper right hand corner of each webpage.



Links to the student assistance section are available elsewhere, including on the Portal. It can be accessed directly via the following URL: md.utoronto.ca/student-assistance

The information provided in the student assistance section is divided into four main areas where issues may arise:

- Personal crisis
- School absences
- Student mistreatment
- Workplace injury and health care access

Each page provides advice, links to resources and/or contact information, relevant policies, etc.

The intention of the student assistance section

This section is a quick reference guide and a way for students to link to various sources of information and also to an incident reporting form. *It is not a 'hotline' and in no way provides direct emergency*

Student Assistance

assistance. It does not connect a user directly to another person, nor does it track who has clicked on the button or what components they have accessed. It does, however, direct users to useful contact information and support services (both internal and external to the University), as well as to a special reporting tool for incidents of mistreatment or unprofessionalism (see following page).

Reporting incidents of concern

The MD Program is committed to continual monitoring and improvement of the learning environment. This includes promoting awareness of what constitutes appropriate behaviour – by teachers, other health professionals, residents and other learners, and students themselves – and providing means to identify when inappropriate behaviour occurs.

The program encourages students who experience or witness behaviour of serious concern in the course of their training to address the situation in one of various ways.
If the incident is relatively minor and the student feels comfortable doing so, it is recommended that the student discuss the situation directly with the person whose behaviour seemed unprofessional. Minor incidents are typically single, apparently isolated events that are troubling, yet do not strike the student as having a significant impact on the learning environment. This direct approach recognizes the role of collegial conversation, and emphasizes the principle of addressing problems locally wherever possible. The student may also wish to approach another trusted MD Program teacher, leader, or administrative staff member for advice.

For more serious or uncomfortable incidents, students are encouraged to report what they experienced or witnessed to a Designated MD Program Leader:

- Associate Dean, Office of Health Professions Student Affairs (OHPSA)
- Academy Director
- Foundations, Preclerkship or Clerkship Director
- Faculty lead for ethics and professionalism
- a course director
- a personal counsellor in the Office of Health Professions Student Affairs

Students can of course choose to speak instead with another individual, but Designated MD Program Leaders have the connections and knowledge of University resources and protocols to provide appropriate assistance.

Student Assistance

Besides a face-to-face meeting, phone call, or e-mail, the MD Program now provides an additional option for students to report an incident to a Designated Leader: the Student Incident Report Form. To submit an Incident Report, students are asked to complete an 'Incident Report Form' located at: https://documents.med.utoronto.ca/Forms/ume-incident-report

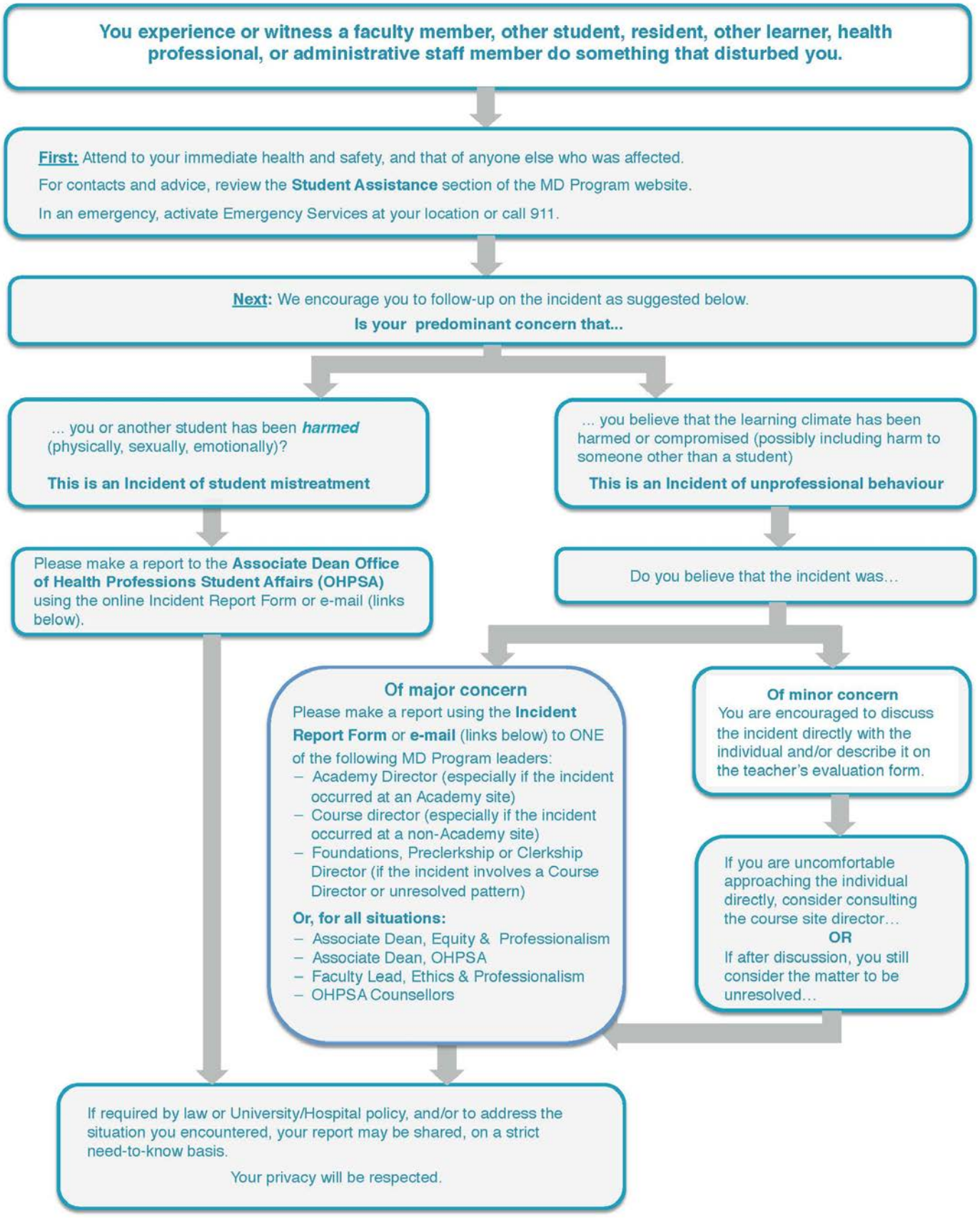
This form can also be found online under 'Student Mistreatment' in the 'Student Assistance' section of the MD Program website.

The MD Program defines two types of incident: student mistreatment (i.e. harm of some kind to a medical student) and other unprofessional behaviour besides student mistreatment (e.g., mistreatment of someone other than a student, misrepresentation of one's qualifications, harassment, etc.). The response to an incident report will depend on the nature of the situation, but in all cases, the reporting student's privacy will be respected and the matter will be treated sensitively and strictly confidentially except where required by law or University policy.

NOTE: The Incident Report Form is a tool to seek follow-up. It is not an emergency notification service.

See the *Protocol for students to report mistreatment or other kind of unprofessional behaviour (PDF)* and also the flowchart on the next page.

Student Assistance



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Student Assistance

Reporting incidents of concern – frequently asked questions

Can I speak to someone else instead of the people listed in the chart above?

Yes, you can choose to make a report to an individual involved in the MD Program who is not listed above. However, in such a case, the recipient of the report is strongly advised to help redirect you to a MD Program leader as listed in the flowchart. For details, see the *Protocol for MD Program students to report mistreatment and other kinds of unprofessional behaviour (PDF).* This protocol is for your protection and theirs. Many situations involving harmful behaviour are complicated and require detailed knowledge of policies, procedures, and resources.

What will the MD Program do to help me, or to resolve the issue?

If you make a report to a MD Program leader identified in the chart above, he/she will provide guidance to you, offer you access to resources and services as appropriate, consult university and/or hospital policies (as relevant) to determine the appropriate steps to be taken, and, if warranted, set in motion a formal investigation process. You should be aware that in most instances, issues cannot be fully addressed by one person alone. Therefore, it is likely the person you make the report to will enlist the involvement of others, with your permission.

Will anything change in the long-run?

We will create a summary report of incidents submitted through this process annually which omits information that identifies you, the reporter. Incidents are recorded for statistical analysis to allow the Faculty of Medicine to monitor the health of the learning environment and make targeted changes over time for the benefit of students and other members of the Faculty community.